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FACTORS RELATED TO PROSOCIAL BEHAVIOR:
AN INVESTIGATION OF MORAL REASONING LEVEL AND FIVE MEASURES OF PERCEIVED SITUATIONAL CHARACTERISTICS

by

© JOY KUMIKO EUSTACE

A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled, Factors Related to Prosocial Behavior: An Investigation of Moral Reasoning Level and Five Measures of Perceived Situational Characteristics, submitted by Joy Kumiko Eustace in partial fulfillment of the requirements for the degree of Master of Education in Counselling Psychology.

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DEDICATION

This thesis is dedicated to my parents,
James and Chizuko Kimura
who taught me to value learning, and
whose personal sacrifices allowed me
the opportunity to pursue it. With love.

ABSTRACT

The general aim of the present study was to determine under what conditions prosocial behaviors were likely to be performed. The conditions that were investigated included moral reasoning level, and measures of perceived responsibility, sacrifice, effectiveness, importance to self, and importance to other.

Questionnaires were distributed to 100 adult volunteers, 68 of whom responded. The questionnaires consisted of four hypothetical scenarios portraying a conflict between the interests of the subject and the interests of another person or group of persons. Following each scenario, each subject was asked to respond to questions regarding his/her: (1) preferred moral action choice, (2) justification of the action choice, (3) perceptions of the scenario along the dimensions of responsibility, sacrifice, effectiveness, importance to self, and importance to other, and (4) estimation of actual behavior in the situation.

The first major finding was that level of moral reasoning was not related to the liklihood of prosocial responding in any of the four situations. The second major finding was that in general, the five measures of perceived situational characteristics were significant predictors of prosocial action. However, it was found that the independent variables differentially interacted with prosocial behavior across the four situations, thereby precluding generalized conclusions about the correlates of prosocial action.

Two major post hoc analyses were conducted. First, to determine whether the independent variables and/or prosocial responding possessed personological qualities, intercorrelations of each variable across the four situations were computed. The results of this analysis suggested that subjects were not trans-situationally consistent on these dimensions. Secondly, a factor analysis was performed on the data from the four situations to determine whether an underlying pattern of relationships existed between variables, such that the total body of data could be reduced to a more manageable and interpretable level. The first four rotated factors clearly corresponded to the four scenarios.

The overall results of the present study were discussed within the context of the current person versus situation debate. It was concluded that a multivariate, interactionist approach more adequately accounted for prosocial action than either a personological or a situationist perspective.

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CHAPTER I

INTRODUCTION

Background to the Psychological Study of Morality

One of mankind's earliest and most enduring inquiries has been into the nature of morality. However, because of its traditional association with philosophy and theology, the subject of morality had generally been regarded as outside the psychological domain.

Within the past two decades, psychological research investigating the nature of morality has proliferated. Rest (1979) and Wispé (1978) have attributed this growing interest to two factors. First, a number of major social events have recently focussed the public's and the academics' attentions on moral issues. The Civil Rights' Movement, the Vietnam War, the 1960's student protests, Watergate, and the Women's Movement all had a distinct moral flavor. Rapid technological and social change, together with the weakening of traditional institutions of social control, have forced individuals to question and at times re-create their own ethical belief structures. In short, recent social conditions have been such that it has been difficult for the average person to be unaware or unconcerned about moral issues.

Secondly, recent developments within the field of psychology have produced a climate favorable to the study of issues such as morality. The two major models which directed psychological research prior to the 1960's held conceptions of human nature and human behavior which precluded specific study of morality. Both the Freudian and the behaviorist models assumed that people behaved according to the hedonistic principle; therefore the question of morality was essentially reducible to one of socialization. Humanistic theories posed a serious challenge to this assumption and thereby legitimized considerations that individuals may forego personal benefits in the service of a larger good. Behaviorism also had a restraining influence on the development of moral psychology through its insistence that observable events were the sole objects of legitimate scientific study, and through its assumption that a single principle could account for all behaviors. The ways in which people thought about events were considered not amenable to scientific inquiry. Furthermore, all behaviors were presumed to be governed by the same principle; hence, "moral" behavior did not warrant special status in relation to other types of behaviors. The growing impact of cognitively-oriented theories has convinced many researchers of the need to consider the ways in which people perceive, organize, and interpret events. The success of cognitive psychology was an important step insofar as the development of a moral psychology was concerned since morality essentially refers to the ethical beliefs people hold, the manners in which people evaluate situations and events, and the ways in which these beliefs and interpretations are translated into action.

Morality and Prosociality

Different conceptions of morality have been advanced by various philosophic models. The intent of the present study was not to debate the relative merits of these theories. Rather, the conception of morality which has been advanced by Kohlberg (1966, 1971, 1976), and which has been assumed in a majority of moral psychological studies, was adopted in the present study. Psychologically, morality has been studied in terms of the evaluative principles which people hold, the ways in which people apply these principles to the judgment of events, and the manner in which behaviors derive from these principles. Within Kohlberg's model, morality is viewed as a multi-level, developmental concept; that is, "morality" assumes different meanings at the various stages of development. At each successive stage, moral principles become increasingly differentiated, and better able to resolve conflicts between competing claims of persons in a manner characterized by universality, consistency, and impersonality (Kohlberg, 1966). At the highest stage, moral judgments are based on a conception of justice which refers to "the distribution of rights and duties regulated by concepts of equality and reciprocity", (Kohlberg, 1976, p. 40). Morality thus conceptualized is a social concept -- it deals with the principles which underlie equitable relationships between persons. Because of the inherently social nature of morality conceptualized in this way, the present study refers to "moral behaviors" as "prosocial behaviors" to emphasize this social quality of morality and to differentiate this specific conception from other philosophic conceptions of morality.

The term "prosocial behavior" has been used in a variety of contexts by psychologists and sociologists and therefore requires some definition. The term "prosocial behavior" has generally been used to refer to any behavior which brings about positive consequences for another person or group of persons. The static and unqualified nature of this definition invites the interpretation, made by several researchers (e.g., Krebs, 1978; Weitman, 1978) that prosociality is inferior to morality. Krebs (1978) argued that according to Kohlberg's theory of moral development, prosociality is but one of several aspects of morality. Although Krebs acknowledged the changing conceptualization of prosociality at different moral development stages, he suggested that prosociality is most characteristic of the conventional mode of thinking. The present author contended that conclusions of this type are based on too restricted a view of prosociality.

The essential question to be dealt with is, "Prosocial towards whom?" If one defined prosociality as the tendency to behave in ways that bring about positive consequences for members of a particular group, then it becomes clear why prosociality should be associated with a particular stage of moral reasoning, and why writers such as Krebs (1978) have viewed prosociality as inferior to morality at higher stages. As Weitman (1978) has pointed out, social behavior "that is positive for whom it is meant is *ipso facto* negative - or, at the very least, potentially negative - to others who were not taken into account," (p. 230). The contention that morality is superior to prosociality has been based on arguments such as this -- if a person behaves in a manner which benefits a particular individual, but by the same act harms the wider community, then that act may be termed prosocial even though it is not moral. This argument however, is clearly fallacious since it contrasts a wide definition of morality with a narrow view of prosociality.

If one however, conceived of prosociality as a multi-level concept (analogous to the manner in which cognitive-developmentalists conceive of morality), then it could be argued that prosociality and morality are essentially equivalent. To illustrate, consider a model which depicts a centre point surrounded by a number of concentric circles (cf. Schaefer, 1913). The centre point represents the self, and the circles with increasingly larger radii represent groups of other persons who are increasingly more psychologically remote from the self (e.g., family, relatives and friends, community, country, mankind in general). Prosocial development then, could be conceived of as an increasing tendency to act on behalf of persons more and more psychologically remote from oneself. Viewed in this manner, a person who acts on behalf of his family and to the detriment of a larger group, is behaving both prosocially and morally, but both to a limited degree. Similarly, a person who behaves in the best interests of mankind in general may be conceptualized as at the highest level of prosocial development, and operating on the basis of the highest stage of moral reasoning. This correspondence makes sense from a cognitive-developmentalist point of view. The development of structures makes it possible for a person to assume the role of another (empathy), consider a range of possibilities, and think in ideal and abstract terms. These developing abilities, which are presumed to underlie moral development, can also be conceptualized as underlying prosocial development.

Nature of the Problem

The general aim of the present study was to determine under what conditions prosocial behaviors were likely to be performed. Prosocial behavior has been studied from several psychological viewpoints, but, as has been the case with many topics in psychology, there has been little integration of the findings derived from the various perspectives.

The cognitive-developmental model of Piaget (1932) and Kohlberg (1958, 1963, 1969, etc.) has been the most unified and influential approach to the psychological study of morality. While the theoretical core of this approach has focussed on the ways in which people reason about and judge moral issues, a large literature has evolved which has attempted to establish a relationship between moral reasoning and moral or prosocial behavior. While there has been some theoretical indication that such a relationship should exist (Ahlskog, 1978; Candee, 1976; Kohlberg, 1971), empirical support of this relationship has been equivocal since studies have typically, (1) failed to control for the possibly confounding effect of content of moral reasoning, (2) disregarded subjects' conceptions of the situations in which moral behaviors were assessed, and/or (3) assumed that moral reasoning was consistent and stable across situations. Therefore, the first problem considered by the present study was whether a relationship existed between prosocial behavior and structure of moral reasoning.

In general, cognitive-developmentalists have focussed solely on the relationship of moral reasoning to prosocial behavior, neglecting other variables which at least intuitively, seem associated with prosocial action. The second problem considered by the present study was whether consideration of additional factors would enable one to predict the performance of prosocial behaviors more accurately than on the basis of moral reasoning level alone.

A number of variables other than moral reasoning level have already been investigated in relation to prosocial behavior. However, the theoretical underpinnings of these investigations are open to a number of criticisms. Researchers operating within the personological paradigm have focussed on the identification of within-person factors which are presumed to account for prosocial behavior. That is, they have attempted to identify characteristics of individuals who behave in a consistent manner across various situations which call for prosocial action. Researchers advocating the situationist perspective have argued that the performance of prosocial behavior is dependent on the characteristics of the situation that requires such action. Studies derived from this model have typically involved the manipulation of environmental variables to determine the effects of situational differences on the liklihood of prosocial action.

While considerable progress has been made within each of these two paradigms, there is growing doubt that either model, in itself, can account for the complexity of prosocial behavior. Most notably, the personological viewpoint has found it difficult to explain intra-individual inconsistency in prosocial behavior, and the situationist perspective has been unable to reckon with individual differences in response to experimental treatments. These difficulties represent major challenges to the theoretical foundations on which these paradigms are based.

Recently, a growing number of researchers have shown interest in an integrative approach, and have begun to elaborate on and promote a person x situation interactionist orientation.

The central theme of this approach is that the effects of personological characteristics, situational factors, and the interaction between the two must be simultaneously considered in the explanation of behavior. Despite the potential of this approach to resolve many of the major difficulties inherent in traditional paradigm-bound research, much of the energies of researchers operating within this perspective have been focussed on the resolution of conceptual and methodological problems inherent in any mixed-paradigm orientation (Endler & Magnusson, 1976; Hunt, 1975; Magnusson & Endler, 1977; McCann, 1978; McCann & Short, 1979). The present author contended that the interactionist orientation was a promising approach to the investigation of prosocial behavior. This viewpoint underlaid the present study's focus on subject's perceptions of the situations in which prosocial behaviors were assessed.

Purpose of the Study

The major purposes of the present study were twofold. The first objective was to determine whether a relationship existed between prosocial behavior and structure of moral reasoning. Stated in another way, the present study was designed to assess the degree to which performance of prosocial action could be predicted on the basis of the moral reasoning level used to justify that action. The second major objective was to determine if inclusion of measures of five perceived situational characteristics (responsibility, sacrifice, effectiveness, importance to self, importance to other) would increase the accuracy of prediction of prosocial behavior beyond the level of prediction that was possible on the basis of moral reasoning level alone.

Four hypothetical scenarios were constructed in which the interests of an individual (the subject) were placed in conflict with the interests of another person or group of persons. Responses to the four scenarios were analyzed separately since it was assumed that each subject's responses would be a result of that individual's unique characteristics _as they interacted_ with the characteristics of the situation. The rationale for including four scenarios was that each of the independent variables hypothesized to be related to prosocial behaviors in general, may not have been relevant or salient to any one particular prosocial act. It should be noted that it is theoretically impossible, from a person x situation interactionist perspective, to create situations _a priori_ which will have a particular effect on all persons. Thus, while one cannot argue that these scenarios were representative of prosocial behavioral situations in general, inclusion of several scenarios should have provided a better coverage of the prosocial behavioral domain than any one scenario in itself.

While it was necessary for conceptual reasons to analyze the responses to the four situations separately, some integration of the findings was considered as a secondary objective of the present study. First, the present study determined whether prosocial behavior was more likely to occur in some situations as compared to others. Secondly, the patterns of relationships between independent variables and dependent variables were studied across situations in order to note their similarities or differences.

CHAPTER II

DISCUSSION OF PERTINENT ISSUES AND A REVIEW OF THE RELATED LITERATURE

Overview

The general focus of the present study was on the prediction of prosocial behavior. More specifically, it was questioned whether moral reasoning level and five measures of perceived situational characteristics were significant predictors of prosocial behavior in an adult population.

The first issue to be discussed in this chapter is the general relationship between moral reasoning and moral behavior. It is argued on a theoretical level that the relationship between moral reasoning and moral behavior can be unequivocally tested only if certain conditions are taken into account. It is further suggested that many studies have overlooked this fact, and thus may have provided inappropriate tests of the reasoning-behavior relationship. This section concludes by suggesting that although a person's level of moral reasoning may be related to the liklihood of that person performing the moral act, typically, several other factors enter into the final decision whether to behave morally.

Given that factors in addition to subjects' levels of moral reasoning are hypothesized to be related to moral behavior, the second section of this chapter summarizes the findings of selected studies which have attempted to identify variables related to prosocial action. Typically, these studies have focussed on either personological or situational factors. The problems inherent in both the personological and the situationist paradigms are discussed, and an alternate approach, the person x situation interactionist orientation, is recommended.

The chapter concludes with a brief summary of the research related to prosocial action integrated within the focus and aims of the present investigation. The specific problems to be investigated, and the hypotheses to be tested are stated.

The Relationship Between Moral Reasoning and Moral Behavior

Researchers interested in studying moral reasoning have generally based their studies on the cognitive-developmental model of Piaget (1932), and the developmental moral reasoning model described by Kohlberg (1958, 1963, 1969), which have focussed on age-related changes in the ways in which people reason about, and judge moral issues.

Research findings which have demonstrated a relationship between level of moral reasoning and moral behavior have been considered problematic (Krebs, 1978). Although of considerable practical importance, moral behavior is, from a theoretical viewpoint, peripheral to the cognitive-developmentalist perspective. Of interest to the cognitive-developmentalists are those age-related changes in the structure of moral reasoning;

the actual choices that individuals make in a moral conflict situation, i.e., the contents of moral reasoning, are of minor theoretical interest. Nevertheless, there have been a number of studies which have attempted to demonstrate a linear relationship between moral reasoning level and moral behavior. The evidence presented by these studies however, does not provide unequivocal support for the reasoning-behavior relationship since research has typically (1) confused content and structure, (2) disregarded subjects' conceptualizations of the situations in which moral behaviors were assessed, and/or (3) assumed that moral reasoning level had trait-like qualities, i.e., was stable across situations. Following, are elaborations of these three points.

Content and Structure

Simply stated, structure refers to how a person thinks whereas content refers to what a person thinks. With respect to moral reasoning, structure is reflected in the principle or "metaethic" on which judgments of right and wrong are based; content refers to the actual choices that are made in a moral conflict situation.

A number of studies have identified situations in which the logic of the moral structure actually determined the nature of the moral choice (e.g., Candee, 1976; Haan, Smith, & Block, 1968; Kohlberg, 1971; Krebs, 1978). Kohlberg (1973) has contended that individuals at the highest level of moral development would, if given the same information, advocate the same course of action in any moral conflict situation. At the lower and intermediate stages of moral development however, such isomorphism between structure and choice is generally not expected on theoretical grounds.

Thus, two people at the same level or stage of moral reasoning may, in response to the same conflict situation, advocate opposing courses of action. Conversely, two people at different levels or stages of moral reasoning may, in response to the same conflict situation, advocate the same course of action. Given such possibilities, it seems erroneous to assume that a simple relationship between moral reasoning level and an experimenter-defined moral behavior should exist, (Rest, 1979).

Subjects' Perceptions of the Conflict Situation

As early as 1935, Koffka distinguished between the objective and the subjective environment, and argued that people respond primarily to the subjective environment. More recently, this point has been reiterated by a number of psychologists advocating an interactionist orientation (e.g., Endler & Magnusson, 1976; Krau, 1977; Magnusson, 1971; Pervin, 1977).

Research investigating the relationship between moral reasoning level and moral behavior however, has typically neglected to take into account subjects' interpretations of the situations in which moral behaviors have been assessed (Brown & Herrnstein, 1975; Lickona, 1976). To illustrate, researchers have equated "moral behavior" a priori with such actions as resisting authority (McNamee, 1968), donating to a charity (Emler & Rushton, 1974), and keeping a promise (Jacobs, cited in Rest, 1979), and have hypothesized that subjects at increasingly higher levels of moral reasoning would be more likely to perform the "moral act". Such hypotheses are based on the tenuous assumption that all subjects interpreted the situation in the manner which the researcher had intended. Consider an example wherein the researcher had defined "donating to a charity" as a "moral act"; it is conceivable that certain subjects may have regarded the charity as an unworthy one, in which case, donating may have been regarded as an "immoral act". The point to be emphasized is that one cannot conclude that subjects do, or do not act in accordance with their principles unless one is aware of subjects' interpretations of the situation and the action in question.

Can Moral Reasoning be Assigned Trait-like Qualities?

The cognitive-developmentalists' view that the qualitative differences in moral reasoning reflect differences in the underlying, wholistic cognitive structure, implies that level of moral reasoning can be regarded as a personological variable. This implication provides a rationale for studies which have attempted to relate moral behavior in Situation X, to moral reasoning level assessed independently of that situation. However, there is considerable evidence to suggest that it may be erroneous to assign trait-like qualities of stability and consistency to subjects' levels of moral reasoning (Hoffman, 1977; Kay, 1970).

The first line of evidence comes from studies which have demonstrated that tests of moral judgment level have low test-retest reliability (Rubin & Trotter, 1977), and weak internal consistency across subtests (Crockenberg & Nicolayev, 1979; Fishkin, Keniston, & MacKinnon, 1973; Larson & Kurdek, 1979; Rubin & Trotter, 1977). For example, Fishkin, *et al*., (1973) did not find one subject in a sample of 75 college students who obtained the same stage score across five Kohlberg dilemmas.

The second line of evidence comes from studies which have found differences between the levels of reasoning employed in "real-life" *versus* classical Kohlberg dilemmas. Haan (1975) found that two-thirds of a large college sample employed different stages of moral reasoning in response to questions about a protest movement than they had in response to Kohlberg's dilemmas. Leming (1974) found that although 12th grade students responded more maturely than 8th grade students to classical moral dilemmas, there was no significant difference between groups in the average stage of reasoning employed in response to personally relevant dilemmas.

In view of these findings, it seems unwarranted to presume that level of moral reasoning assessed in one situation should relate to behavior assessed in a different situation, since it is possible that different levels of reasoning were employed under the two conditions.

Related to the issue of intra-individual variability in moral reasoning, is the question of whether people in real-life conflict situations conceive of these situations in moral terms, and/or if they base their actions on moral considerations. Although this problem has not been studied empirically, its importance has been underscored by several researchers, (Lickona, 1978; Rest, 1979).

Conditions Under Which the Reasoning-Behavior Relationship May be Validly Assessed

To summarize the foregoing discussion, a number of conditions must be met in order to validly assess the relationship between structure of moral reasoning and moral behavior. These conditions are required in order to control the contaminating effects of: content of moral reasoning, individual differences in situation perception, and intra-individual variability in moral reasoning level. Specifically, studies purporting to investigate the relationship between structure of moral reasoning and moral behavior should:

1. insure that the situation in which behavior is to be assessed is perceived in moral terms,
2. hold content (i.e., the action choice that is regarded as morally correct) constant, (a) by selecting situations in which only one action is morally defensible on any grounds, or preferably, (b) by relating only those justifications from subjects who chose a common

course of action to the assessed behavior, and

3. assess moral reasoning level in response to the specific situation in which the behavior is to be performed.

Why Structure Should be Related to Behavior

The present author contended that many studies which have purported to demonstrate a relationship between level of moral reasoning and moral behavior, may have provided inappropriate tests of the reasoning-behavior relationship since they failed to control for the effect of content. A spurious correlation could conceivably be found between reasoning level and behavior, simply because both may be related to content (Candee, 1976; Krebs, 1978).

But what of the relationship between structure of moral reasoning in itself, and moral behavior? At the time of writing, the present author was not aware of any studies that investigated this question empirically. However, some theoretical support has been given for such a relationship (Ahlskog, 1978; Candee, 1976; Kohlberg, 1971). Kohlberg (1971) has asserted that development of moral reasoning in part, involves an increasing ability to differentiate between "true" moral values and judgments, and other types of values and judgments (such as status or property values, instrumental values, egocentric sentiments). As Candee (1976, p. 1300) has stated, "at lower stages factors which are irrelevant in terms of a philosophically valid moral decision may be given greater weight", whereas these factors lose their persuasiveness for more morally advanced individuals. Thus, a moral action choice based on a more advanced level of reasoning should be related to a greater liklihood of that action being performed since fewer factors which could counter-influence that behavior are operative.

Is Reasoning Enough?

While maintaining that moral reasoning level is an important variable in the prediction of moral behavior, several researchers within the cognitive-developmental paradigm have advocated the consideration of additional factors (Kohlberg, 1976; Lickona, 1978; Maschette, 1977; Rest, 1979). These factors have been thought to operate as intervening variables between the moral action choice and the actual behavior (Lickona, 1978).

Researchers based in other paradigms have made the same point, albeit more emphatically. They have criticized the cognitive-developmentalists for overestimating the importance of reasoning, and for underestimating the role of factors such as personality, affect, situational characteristics, and habit (Aronfreed, 1976; Hogan, 1975; Mischel & Mischel, 1976). Mischel and Mischel (1976) have pointed out that "knowledge of individuals' moral reasoning would permit one to predict no more than about 10 percent of the variance in their moral behavior", (p. 101). They have suggested that moral reasoning may be an important factor in the individual's competence to generate prosocial behaviors, but that a number of motivational variables are necessary for performance of those behaviors.

In sum, there is considerable evidence, and a growing consensus amongst researchers that moral behavior is a multi-determined phenomenon. Having accepted this as a datum, the next problem becomes one of determining the nature of those variables related to moral action.

Variables Related to the Performance of Prosocial Behavior

Psychologists have typically approached the general problem of behavioral prediction from one of two different perspectives, *viz*., the personological or the situationist approach. These approaches may be regarded as paradigms in Kuhn's (1962) sense. Because of their fundamental disagreement on such issues as conceptualization of the problem and methodology, there have been relatively few attempts to integrate the findings derived from the two approaches. A review of the literature pertaining to prosocial behavior suggests that researchers investigating this topic have been similarly demarcated in terms of these two paradigms. This demarcation is noteworthy, since the choice of one paradigm over another to a large degree implies the nature of the questions that are posed, the choice of the variables to be investigated, and the methodology by which these variables are studied.

The Personological Approach to the Study of Prosocial Behavior

Researchers operating within the personological paradigm have focussed on the identification of within-person factors which are presumed to account for prosocial behavior. This focus assumes an underlying stability and continuity of personality. Essentially, the question that personologists have posed is, "What are the characteristics of individuals who will behave in a prosocial manner across various situations that call for such actions?"

The term "personological approach" is a generic one encompassing such models as the psychodynamic, type, and trait theories. For the purposes of the present study, only the trait theorists' contributions to the understanding of prosocial behavior will be discussed.

Advocates of the trait approach conceptualize the person as a combination of stable, continuous dimensions, each representing an individual difference construct. These dimensions, or "traits" are "latent dispositions to act in a certain way, and individuals manifest, by their reactions, a rank-order with regard to this disposition," (Magnusson & Endler, 1977, p. 17). The effects of situational characteristics are recognized, but only insofar as they generally inhibit or promote the behavior in question; situational factors should not alter the rank-ordering of individuals for any given trait. Research derived from the trait approach has typically utilized correlational techniques to demonstrate the relationship between prosocial behavior and scores on an independently assessed trait dimension.

Traits relevant to prosocial behavior. The findings of studies which have attempted to demonstrate a relationship between prosocial behavior and scores on an independently assessed trait dimension have been mixed. Staub (1974) found that responsibility ascription, social responsibility, Machiavellianism, beliefs about human nature, and locus of control were all significantly related to helping behavior. Hogan (1970, 1973, 1975) and Hogan and Dickstein (1972) have argued that five dimensions of character structure (moral knowledge, moral positivism-moral intuitionism, socialization, empathy, and automony) underlie prosocial behavior. Schwartz (1973, 1977) and Schwartz and Clausen (1970) have suggested that individual differences in prosocial behavior are a result of differential tendencies to be aware that one's actions may have consequences for the welfare of another, and differential tendencies to deny or take responsibility for one's actions. Social responsibility has been studied by Berkowitz and Daniels (1964) and by Willis and Goethals (1973) and found to be significantly related to prosocial action.

On the other hand, several studies have not found the expected relationships between personality traits and prosocial behavior. For example, Darley and Latané (1968) found no relationship between prosocial action and measures of Machiavellianism, anomie, authoritarianism, need for approval, and social responsibility. Yakimovich and Saltz (1971) failed to find a relationship between prosocial behavior and New Leftism, trustworthiness, independence, altruism, and locus of control.

An instructive study was one conducted by Gergen, Gergen, and Meter (1972) who investigated the relationship between ten trait dispositions (abasement, autonomy, change, deference, nurturance, order, self-consistency, self-esteem, sensation seeking, and succorance) and five separate measures of prosocial behavior. They found that although all ten traits were significantly correlated with at least one of the prosocial behavior measures, none of the trait dimensions was a significant predictor of all prosocial acts. This finding led them to conclude that whether a trait-behavior relationship exists depends on the type of situation in question.

Problems with the trait approach. The trait approach has been taken to task on three issues: (1) the assumption of stability, (2) the assumption of consistency, and (3) the predictive utility of traits. Bloom's (1964) work, Stability and Change in Human Characteristics, presented a major challenge to the assumption of stable personality traits. Information regarding physical characteristics, intelligence, achievement, interests, attitudes, and personality was studied, and it was found that the least stable scores were for measures of personality and motivation.

The second criticism has been directed at the assumption of consistency. Considerable evidence has accumulated to suggest that people are not consistent in their expression of what researchers have regarded as important, unitary traits. As early as 1928, Hartshorne and May found that the average intercorrelation of twenty-three tests used to measure "moral character" was +.30, suggesting little consistency across characteristics such as helpfulness, cooperativeness, honesty, etc., which were presumed to be components of moral character, (Hartshorne & May, 1928, 1929; Hartshorne, May, & Shuttleworth, 1930). Since then a number of studies have found similar evidence (see Bem & Allen, 1974; Magnusson & Endler, 1977). However, inconsistency at the level of reaction variables (e.g., overt behaviors) does not necessarily imply inconsistency at the level of mediating variables (e.g., traits) as Magnusson and Endler (1977) and Bowers (1977) have pointed out. Stated in another way,

> the traditional trait-based research study will yield evidence of cross-situational consistency only if the individuals in the research sample agree with the investigator's a priori claim that the sampled behaviors and situations belong in a common equivalence class and only if the individuals agree among themselves on how to scale those behaviors and situations... The traditional verdict of inconsistency is in no way an inference about individuals; it is a statement about a disagreement between an investigator and a group of individuals and/or a disagreement among the individuals within a group, (Bem & Allen, 1974, p. 510).

Thus, while certain aspects of the trait model may still be defensible, there appears to be a growing argument that the search should be for coherence (i.e., lawfulness) rather than for consistency (i.e., stable rank-orderings). This shift entails reconceptualization of two major components of traditional trait theory: (1) a relinquishing of the nomothetic assumption that all traits can be applied to all persons (in all situations), and (2) a consideration of the subject's phenomenology such that behavioral "consistency" would only be predicted across situations that are psychologically equivalent for that person, (Bem & Allen, 1974; Mischel, 1979).

Finally, the trait approach has been criticized for its limited ability to predict behaviors. A number of researchers (e.g., Gergen, et al., 1972; Mischel, 1968, 1969; Mischel & Mischel, 1976; Sarason, Smith, & Diener, 1975; Tyler, 1978) have pointed out that validity coefficients for measures of personality traits typically range from .20 to .50 and are usually about .30. However, as Epstein (1977) has argued, most attempts to establish the validity of traits have computed coefficients across subjects tested on only two variables (the trait measurement, and the criterion behavior); the low coefficients may reflect an inadequate sampling of criterial behaviors. Fishbein and Ajzen (1974) have made a similar point in their work on attitude-behavior relationships, arguing for the necessity of multiple-act criteria. Conversely, arguments have been made for multiple-predictor studies. As Argyle and Little (1976) have stated,

> very few trait theorists argue that specific behavior is predictable from measures of a single trait... Social behavior will be determined by the interaction of _multiple_ traits and the real test is one of finding the most reliable combination of traits for the prediction of relevant social behaviors, (p. 38).

In summary, there have been numerous criticisms, and an equal number of rebuttals of the trait approach. Whether these criticisms lead to an abandonment of the traditional trait approach, or to a reconceptualization of it, remains to be seen. Following is a discussion of the opposing viewpoint in the person _versus_ situation debate.

The Situational Approach to the Study of Prosocial Behavior

Researchers operating within the situationist paradigm have focussed on the identification of environmental characteristics which are presumed to account for prosocial behavior, arguing that behavioral variability can be accounted for in terms of environmental differences. Unlike the trait theorists, situationists assume no underlying, within-person dispositions that influence behavior. They predict behavioral consistency only across those situations that are functionally equivalent. Essentially, the question that situationists have posed is, "What are the characteristics of those situations in which people are more likely to behave prosocially?"

Situationists emphasize the individuals' responses to environmental stimuli, and assume that valid stimulus-response laws can be formulated to relate antecedent stimuli to consequent responses. Research derived from the situationist approach has typically involved the manipulation of environmental variables and the observation of consequent responses.

Situational characteristics related to prosocial behavior. Perhaps because of its roots in S-R and social learning theories, much of the research linking prosocial behavior to situational characteristics has focussed on processes such as modelling and cost-reward analysis. Bryan and Test (1967) and Hornstein, Fisch, and Holmes (1968) have investigated the effects of altruistic models on the behavior of observers, and have found that the probability of helping and donating behaviors increased when models were observed performing these actions.

Evidence that individuals assess costs and evaluate probable outcomes of their behaviors before deciding to behave prosocially has been found by a number of researchers. In evaluating probable outcomes of behaviors, four types of costs (and benefits) may be considered by the actor: social, psychological, physical, and moral costs (Schwartz, 1977). Much of the situationist research has attributed the effects of manipulations of environmental variables to the shifting of the cost-reward balance. For example, Latané and Darley (1970) found that the presence of inactive others decreased the liklihood of helping behavior; they hypothesized that the presence of inactive others (1) provided cues to the potential helper which suggested that the need was not serious, and (2) allowed for diffusion of responsibility, such that no one person could have been blamed for not having helped. Legitimacy and seriousness of another's need has been found to be positively related to helping behavior (Berkowitz, 1973; Bickman & Kamzan, 1973), as has degree of dependency of the person seeking assistance (Berkowitz & Daniels, 1963, 1964), presumably because the psychological, social and moral costs of inaction were relatively great. However, if acting on behalf of another entails inconvenience for the actor, helping behavior is unlikely (Darley & Batson, 1973; Gross, Wallston, & Piliavin, 1975; Pomazal & Clore, 1973; Sobesky, 1978).

Although a variety of situational variables have been found to produce changes in the liklihood of prosocial action, the findings have been synthesized on a conceptual level as resulting from an imbalance between costs and rewards. As Piliavin, Rodin, and Piliavin (1969) have stated:

> The response that will be chosen is a function of a cost-reward matrix that includes costs associated with helping (e.g., effort, embarrassment, possible disgusting or distasteful experiences, possible physical harm, etc.), costs associated with not helping (mainly self-blame and perceived censure from others), rewards associated with helping (mainly praise from self, victem, and others), and rewards associated with not helping (mainly stemming from continuation of other activities), (p. 298).

Problems with the situationist approach. The situationists have been criticized on three grounds: (1) their tendency to view negative findings of research relating prosocial action to personality traits as support for the situationist approach, (2) the potentially unfalsifiable nature of their assertions, and (3) their inability to deal with individual differences.

One of the main sources of support for the situationist approach has come from the inability of personological researchers to demonstrate cross-situational consistency of behaviors that are presumed to be mediated by the same traits. Mischel's (1968) influential work in which he pointed to the commonly found +.30 ceiling on cross-situational correlation coefficients, and concluded that situational specificity of behavior appeared to be the rule, provided an impetus for those advocating the situationist paradigm. However, lack of support for the trait model cannot be read as support for the situationist model. In fact, evidence has suggested that the superiority of the situationist model over the personological model has not been clearly demonstrated. A systematic examination of 102 studies led Sarason, _et_ _al_., (1975) to estimate that the average variance accounted for by situational variables was 10.3% compared to 8.7% for personality variables. They concluded:

> The telling points made by Mischel (1968, 1969) and others regarding transsituational consistency of behavior and the low level of predictability of behavior from conventional personality assessment devices have resulted in an increasingly widespread conviction that situational variables are prepotent determinants of behavior and that individual difference variables are, by comparison

> of only minor importance... The present survey suggests that although situational variables do indeed account for a slightly higher proportion of variance, their margin of superiority is by no means striking enough for them to be considered prepotent by comparison, (p. 204).

Bowers (1976) has argued that the situationists' claim of situation-specificity is potentially unfalsifiable. He noted that instances in which ostensibly changed environments failed to result in corresponding changes in behavior have been regarded as "nonevents" and have been kept from public view by the nonpublication of negative results. Seldom were negative results considered to be suggestive of stability of the dependent variable across treatment conditions. What was more likely to have been concluded was that the apparently different environments were not *truly* so, and more extreme experimental manipulations were attempted. The essence of Bowers' argument is that "if (truly) changed environments can only be inferred from changed behaviors, then the potential circularity of the situationist model becomes actual and vicious", (p. 139). In order to build a convincing argument for situation specificity of behavior, it would be necessary to demonstrate that behavior is "systematically related to measurable or scalable properties of the environment, and not merely different in different situations", (McCann, 1978, p. 12). This of course requires the development of an accurate taxonomy of situation attributes, a task which is still in its early stages, (Frederiksen, 1976;

Magnusson, 1976).

The third criticism levelled at the situationists has been with regard to their inability to deal with individual differences. Experimental treatments are conceptualized as having been applied to the "average person", and the behaviors of subjects who do not respond in the typical manner are generally not analyzed further. The fact of the matter is that even when treatments have been extreme, many subjects have not behaved in the predicted manner. For example, Milgram's classic study of obedience has been frequently cited as a case in point for a situationist perspective. What has often been overlooked is that 34% of the subjects did not obey the experimenter (Milgram, 1974). Such individual variation is generally regarded by situationists as "error variance", (Cronbach, 1957) -- but "whether it is error variance or 'lawful' personological variance remains an empirical question", (McCann, 1978, p. 17). It has been argued that situationists have ignored the effects of personological variables in part, because such variables cannot be properly used in an experimental paradigm (McCann, 1978; McCann & Short, 1979). Personological variables cannot be randomly assigned to different subgroups of subjects; while personological variables may be "pseudo-manipulated" by selecting subjects who differ in terms of some individual difference construct, such a method is less than satisfactory since personological variables tend to be intercorrelated.

The experimental methodology thus appears to dictate and limit the situationists' choice of variables for investigation, and ultimately, their conceptualization of the phenomenon.

The Person X Situation Interactionist Orientation

While progress has been made within both the personological and the situationist paradigms, there seems to be a growing doubt that either model in itself can account for the complexity of behavior in general, or of prosocial behavior in particular. The growing awareness of the limitations imposed by traditional paradigm-bound research is currently reflected in the increasing number of researchers advocating the person x situation interactionist orientation.

The idea that the effects of personological characeristics, situational factors, and the interaction between the two must simultaneously be considered in the prediction of behavior is not new. As early as 1935, Lewin posited that "behavior is a function of personality and environment". Despite the apparent validity of Lewin's formulation, large-scale interest in putting this idea into practice has not been shown until recently. Because of the conceptual and methodological problems inherent in any mixed-paradigm orientation, much of the energies of researchers interested in this perspective have been focussed on the resolution of these difficulties rather than on actual application of the approach, (Endler & Magnusson, 1976; Magnusson & Endler, 1977; Hunt, 1975; McCann, 1978; McCann & Short, 1979).

Magnusson and Endler (1977) have summarized the basic elements of the person x situation interactionist orientation as follows:

> 1. Actual behavior is a function of a continuous process of multidirectional interaction or feedback between the individual and the situations he or she encounters.
> 2. The individual is an intentional, active agent in this interaction process.
> 3. On the person side of the interaction, cognitive and motivational factors are essential determinants of behavior.
> 4. On the situation side, the psychological meaning of situations for the individual are the important determining factors, (p. 4).

Given such a framework, it makes little sense to study personological variables in the traditional manner, since to some extent each situation alters the individual and thus his/her behavior. Alternately, it seems unwarranted to manipulate situational characteristics since the researcher can not be certain *a priori* how these manipulations were perceived by individual subjects, (Hunt, 1975; Magnusson, 1976). Individuals construe the situations in which they find themselves based on idiosyncratic motives, moods, sensitivities, and values. "The situation is not a constant, but highly dependent on who is viewing it", (Gergen, *et al.*, 1972, p. 106). The question changes from "What are the characteristics of persons ...?" or "What are the characteristics of situations ...?" to "How do a person's unique perceptions of a situation influence his/her behavior in that situation?" The problem is still one of finding underlying principles and coherence by which to predict behavior, but these must be defined in terms of the subject's phenomenology, not the researcher's (Bem & Allen, 1974).

The interactionist approach to the study of prosocial behavior. In spite of their opposing conceptualizations of prosociality, and their differing methodologies for investigating it, both the personologist and the situationist have managed to find support for their respective models. To a non-partisan researcher, this suggests that both perspectives contain an element of truth while neither model has a monopoly on it. The strength of the interactionist orientation lies in its ability to theoretically incorporate the effects of both situational and personological factors. As such, its theoretical formulation seems more congruent with the existing data than does that of the other two paradigms. Despite the appeal of the interactionist approach, its application to the study of prosocial behavior has been limited. The present author was able to locate only three studies which adopted this perspective. As was discussed previously, Gergen, et al., (1972) found that specific personality traits related to helping behaviors in specific situations. In their replication of the Hartshorne and May studies, Nelson, Grinder, and

Mutterer (1976) found that personological and situational factors both accounted for moderate, and approximately equal proportions of the variance in honesty behaviors. Finally, Staub (1974) reported that moral reasoning level interacted with experimental treatment conditions to determine the occurance of helping behaviors in an emergency situation.

Integration of the Literature Review with the Focus and Aims of the Present Study

The first issue considered in the present chapter was the relationship between structure of moral reasoning and moral behavior. While there has been some theoretical indication that such a relationship should exist, it was suggested that studies have thus far not provided direct tests of the reasoning-behavior relationship since they (1) failed to control for the possibly confounding effect of content of moral reasoning, (2) disregarded subjects' interpretations of the situations in which moral behaviors were assessed, and (3) assumed that moral reasoning was stable and consistent across situations. The first aim of the present study was to provide a more direct test of the reasoning-behavior relationship by taking into account these factors.

Secondly, it was argued that moral or prosocial behavior is a multi-determined phenomenon. Researchers operating within the cognitive-developmental paradigm have typically focussed on the role of moral reasoning in the prediction of moral behavior. Researchers in other paradigms have considered other variables (e.g., personality traits, affect, situational characteristics), but have tended to investigate the effects of single variables both in correlational and experimental designs. In view of the complexity of human behavior, such approaches do not appear to "fit the phenomenon". Thus, one of the focusses of the present investigation was on a multivariate approach to the study of prosocial behavior.

Having acknowledged the necessity of a multivariate approach, the next issue that was discussed was the nature of the variables that might be related to prosocial behavior. While a sampling of those variables which have been studied in relation to prosocial behavior was presented, the present chapter was particularly concerned with the *manner* in which these variables were investigated, i.e., the conceptualizations of the general problem, the assumptions, and the methodologies which have typically directed the particular investigations of prosocial behavior. Psychologists have typically approached the general problem of behavioral prediction from one of two different perspectives: the personological or the situationist approach. The principles underlying these two approaches are formulated in such a way that the findings of studies based in one paradigm are rarely incorporated into the research of investigators committed to the other paradigm. This, in the present author's view, has been one of the major factors impeding the development of a comprehensive model of behavior in general, and of prosocial behavior in particular.

Although the importance of Lewin's principle B = f(P,E) has been acknowledged, it has rarely been put into practice since its formulation in 1935. Recently, a growing number of researchers have shown renewed interest in the idea that personological factors, situational characteristics, and the interactions between them, must be considered in the study of behavior. This viewpoint underlaid the present study's focus on subjects' perceptions of the situations in which behaviors were assessed.

The major differences between the present study and previous studies of prosocial behavior were: (1) the present study did not independently assess traits such as responsibility or empathy and attempt to relate these measures to the behaviors in question, and (2) the present study did not attempt to manipulate situational characteristics such as cost of acting or legitimacy of need on the assumption that those manipulations would be perceived similarly by all subjects. Rather, the present study began from the assumption that each subject would view each situation in a unique manner, based in part on each subject's and each situation's characteristics. Hence, the focus was on measuring perceived attributes of the situations. The second aim of the present study therefore, was to determine how subjects' perceptions of the situation were related to the liklihood of their behaving prosocially in that situation. More specifically, it was questioned whether inclusion of measures of five perceived situational characteristics (i.e., responsibility, sacrifice, effectiveness, importance to self, importance to other) would increase the accuracy of prediction of prosocial behavior beyond the level of prediction that was possible on the basis of moral reasoning level alone.

Four scenarios were presented to each subject, and data were collected on one dependent variable (behavior) and six independent variables (moral reasoning level, and five measures of perceived situational characteristics) for each of the four tasks. For the major analyses, responses to the four scenarios were analyzed separately. Syntheses of the responses to the four situations were subsequently made in the following ways. First, it was questioned whether prosocial behavior was more likely to be performed in some situations as compared to others. Secondly, it was questioned whether the patterns of relationships of independent variables to dependent variables were similar across situations.

Hypotheses

Question One

The first question posed by the present study was whether a relationship existed between prosocial behavior and structure of moral reasoning. This question was tested against Null Hypotheses One through Four which state:

H_o1: There will be a zero correlation between ratings of subjects' levels of moral reasoning, and the degrees to which subjects felt they would behave prosocially in response to the situation described in Story One, ($p < .05$).

H_o2: There will be a zero correlation between ratings of subjects' levels of moral reasoning, and the degrees to which subjects felt they would behave prosocially in response to the situation described in Story Two, ($p < .05$).

H_o3: There will be a zero correlation between ratings of subjects' levels of moral reasoning, and the degrees to which subjects felt they would behave prosocially in response to the situation described in Story Three, ($p < .05$).

H_o4: There will be a zero correlation between ratings of subjects' levels of moral reasoning, and the degrees to which subjects felt they would behave prosocially in response to the situation described in Story Four, ($p < .05$).

Question Two

The second question posed by the present study was whether inclusion of subjects' responses to other variable measures (in addition to moral reasoning level) would increase the accuracy of prediction of prosocial behavior. This question was tested against Null Hypotheses Five through Eight which state:

H_o5: There is no linear relationship between measures of prosocial behavior and the set of independent variable measures (i.e., responsibility, sacrifice, effectiveness, importance to self, importance to other), once the effect of moral reasoning level is adjusted for in Story One, ($p < .05$).

H_o6: There is no linear relationship between measures of prosocial behavior and the above set of independent variables once the effect of moral reasoning level is adjusted for in Story Two, ($p < .05$).

H_o7: There is no linear relationship between measures of prosocial behavior and the above set of independent variables once the effect of moral reasoning level is adjusted for in Story Three, ($p < .05$).

H_o8: There is no linear relationship between measures of prosocial behavior and the above set of independent variables once the effect of moral reasoning level is adjusted for in Story Four, ($p < .05$).

Question Three

Given that subjects have stated that they ought to perform a particular prosocial action, the third question posed by the present study was whether the degree of prosocial responding would be different across situations. This question was tested against Null Hypothesis Nine which states:

H_o9: There will be no significant difference in the degrees to which subjects behave prosocially across the four situations designated as Stories One through Four, ($p < .05$).

Question Four

While Question Two will examine the relative relationship of each independent variable to the dependent variable separately for each story, a further question posed by the present study was whether the patterns of correlations between independent variables and dependent variables were similar across situations. Stated in another way, it was questioned whether the variables related to prosocial action in one situation were of similar relative importance to prosocial action in a different situation. This question was tested against Null Hypothesis Ten which states:

H_o10: There will be a zero mean rank-order correlation coefficient between the ranks of the six independent variable-dependent variable correlation coefficients compared across all possible pairs of story combinations, ($p < .05$).

CHAPTER III

METHODOLOGY

Design

A multivariate correlational design was used in the present study to investigate the relationships between six independent or predictor variables, and one dependent or criterion variable. Data were collected via questionnaire responses. Since the study separately investigated the responses of subjects to four situations, it may be conceptualized as one investigation with three replications.

Subjects

Questionnaires were distributed to a total of 100 adult volunteers. Forty of these questionnaires were distributed to University of Alberta spring session students who were enrolled in a freshman Educational Psychology course, or a senior undergraduate Educational Foundations course. The remaining sixty questionnaires were equally distributed to six friends of the present author, who were asked to complete one of the questionnaires and distribute the remainder to nine additional people. This method of subject selection has been used by Ahlskog (1978) to generate a sample with a reasonably wide variety of ages, levels of education, and social backgrounds. The number of respondents, and the demographic characteristics of the final sample are presented in Chapter Four.

Test Instrument

The test instrument consisted of four author-constructed, hypothetical scenarios in which the interests of an individual (the subject) were placed in conflict with the interests of another person or group of persons (the instrument design methodology and a copy of the test instrument are given in Appendices A and B). In response to each of these scenarios, subjects were first asked to indicate which of two action choices they would advocate from a moral point of view. One of the action choices had *a priori* been designated as the "prosocial action"; however, because of differences in content of moral reasoning due to variations in subjects' perceptions of the situations, it was necessary to establish what each subject regarded as the prosocial act.

Question Two requested subjects to justify (in paragraph form) their action choice. Responses to this question were independently rated by two judges using a six-point scale based on Kohlberg's stage model (see Appendix C for the rating criteria). The mean rating assigned by the two judges was used as an index of the level of moral reasoning used to justify the decision. All the written responses for each scenario were rated together, rather than rating all the responses for each subject. This was done to reduce the possibility of bias due to the halo effect. The inter-judge reliability coefficients for these ratings are presented in Chapter Four.

Five additional questions asked subjects to rate their perceptions of the situation on five-point scales. More specifically, subjects' perceptions of the situation were investigated with respect to the dimensions of:

1. degree of responsibility that the subject felt toward the person or group whose interests were in conflict with his/hers,
2. degree to which the subject regarded his/her prescribed action as potentially effective in bringing about the desired outcome,
3. degree of perceived sacrifice to the subject if he/she should act in the prescribed manner,
4. amount of importance that the subject attached to the defined outcome, and
5. amount of importance that the other person or group presumably attached to the subject's prescribed action.

Finally, subjects were asked to imagine themselves actually in the situation described by the scenario, and to rate on a five-point scale what they believed they actually *would* do under such circumstances. Responses to this question were used as measures of the dependent or criterion variable.

An identical format was used across the four scenarios (subtests). The rationale for including four scenarios was that each of the independent variables hypothesized to be related to prosocial behaviors in general, may not have been salient or relevant to any one prosocial act. It should be clear that it is theoretically impossible, from a person x situation interactionist orientation, to create situations *a priori* which will have a particular effect on all subjects. Thus, while it was not argued that the situations were representative of prosocial behavioral situations in general, inclusion of four situations should have provided a better coverage of the prosocial behavioral domain than any one situation alone. Subject's responses to the four situations were treated separately by situation since it would not have been meaningful to collapse subject's responses to each independent variable measure across the four situations, (i.e., subjects may not have been transsituationally consistent along these dimensions).

Test Administration

Subjects were asked to complete the questionnaires at their convenience and to return them by mail. All questionnaires were completed anonymously and voluntarily. Order of presentation of the four subtests was randomized across subjects. Demographic data regarding age, sex, and highest level of education were also solicited.

The Data

Nature of the Data

The data for each subject (for each subtest) consisted of:

1. a moral action choice made by selecting one of two opposing alternatives,
2. a written statement justifying the above action choice; this statement was assigned a value between one and six, based on the level of moral reasoning employed (Independent Variable One),
3. five responses rated on five-point scales reflecting subject's perceptions of the situation (Independent Variables Two through Six), and
4. one response rated on a five-point scale reflecting subject's estimation of his/her actual behavior should he/she be placed in similar circumstances (Dependent Variable).

Equality of intervals was assumed for the rating scales used in (2), (3), and (4) above. Strictly speaking, such an assumption may not be warranted. However, the treatment of rating scale data as if it were interval data has been widely practiced, and in most cases is defensible (Harris, 1975; Kerlinger, 1973).

Admissibility of the Data

In order to be included in the analysis, conformity to the following criteria was required of the data:

1. the moral action choice designated a priori as the prosocial action was advocated by the subject (Item #1, above),
2. the moral justification was scoreable by both judges (Item #2, above), and
3. the subject's ratings on all scales (Items #3 and #4, above) were complete and clearly marked.

If any of the above criteria were not satisfied, that subject's responses to the entire subtest were deleted from the data pool.

Analyses of the Data

Rater reliability. Two raters judged the moral reasonings employed by subjects. Inter-rater reliability coefficients were calculated for each subtest using the Pearson correlation.

Null Hypotheses One through Four. Pearson correlation coefficients were calculated between ratings of subjects' levels of moral reasoning, and subjects' ratings of the degrees to which they felt they would actually perform the prosocial act. This analysis was conducted separately for each subtest.

Null Hypotheses Five through Eight. A multiple regression analysis was utilized in which the criterion (dependent) variable was a measure of the degrees to which subjects felt they would actually perform the prosocial act. Subjects' rated levels of moral reasoning was the first variable entered into the analysis. The remaining five independent variables were entered using step-wise inclusion procedures. Following the inclusion of each variable, Cohen's (1968) test was applied to determine if the addition resulted in a significant increase in the proportion of accounted for variance. This analysis was conducted separately for each subtest.

Null Hypothesis Nine. A one-way analysis of variance with repeated measures was conducted to test for differences in the degrees to which subjects felt they would behave prosocially across the four subtests. A Newman-Keuls test was applied to test for differences due to treatment (subtest) effects.

Null Hypothesis Ten. Pearson correlation coefficients were computed between each independent variable and the dependent variable. The six correlation coefficients were rank-ordered separately for each subtest. The ranks were then compared for each of the six possible pairs of subtest combinations via Kendall's tau. The mean value of tau was used in the testing of Null Hypothesis Ten.

Limitations of the Present Methodology

The methodology employed in the present study imposed a number of specific limitations on the conclusions which could be drawn from it.

1. The conclusions which can be drawn from the present study are limited by the self-report nature of the data.

The ratings of the perceived characteristics of the situations of course, must be made by the subjects themselves. This was not so great a problem as the one created by the self-report of actual behaviors. First, subjects' responses to the question, "What do you believe you actually would do...?" may have been affected by social desirability factors such as an attempt to portray behaviors as consistent with prescriptions. Secondly, while subjects may have responded "honestly" to the behavioral question, it may have been the case that people truly do not know _a priori_ how they actually would behave in a situation. This may in part be due to the differences between a verbal description of a hypothetical situation _versus_ actually being _in_ that situation, as Brown and Herrnstein (1975) have suggested. The essential problem however, is to a large measure unavoidable. To assess subjects' reported perceptions of a situation, and behaviors in response to the same situation, invariably involves the possibility that one will bias the other.

On the other hand, there is some evidence to suggest that subjects' self-reported behaviors should not be rejected out of hand. For example, Pinneau and Milton (1958) reported that subjects' self-reported behaviors correlated highly with independent reports of the same behaviors made by subjects' wives. Similar findings have been discussed by Epstein (1977).

2. The conclusions which can be drawn from the present

study are limited by the undetermined relationship between measures of moral reasoning employed in the present investigation and more traditional methods such as Kohlberg's interview method, or Rest's Defining Issues Test. Because of the number of subjects required for a multivariate analysis, an interview method with individualized probing was not considered feasible.

In some respects, the present method may be preferable to a more intensive Kohlbergian method, particularly in the case of studies which investigate reasoning-behavior relationships. In typical situations that call for prosocial action, people are unlikely to probe their own reasonings in search of an underlying metaethic. It seems more likely that if moral reasoning affects behavior in everyday situations, it is the type of reasoning that is relatively unreflective in comparison to the more deliberated reasoning elicited by Kohlberg's methods.

3. The conclusions that can be drawn from the present study are limited by the choice of situations which were utilized in the present investigation. In view of this difficulty, comparisons were made across the four situations to determine if some regularity could be identified. As was noted earlier however, there is as yet no established system by which to classify environments. Because of this, and the present study's focus on perceived environments, it

was not possible to generate a sample of situations which would be unequivocally "representative".

4. The present study is also limited by the somewhat atypical manner in which the subject sample was generated, and by the fact that all subjects had, by virtue of their responding, performed a common prosocial action which the nonrespondents had not.

5. The methodology of the present study allowed only for the testing of a model of prosocial behavior in which behavior is the end-product of the following linear and chronological sequence of events: formulation of a moral prescription to act prosocially, consideration of situational factors, and a decision to behave in a prosocial manner. In actual fact, consideration of moral factors may enter into the sequence of events at a later point than indicated above, or, the three components may occur simultaneously or iteratively.

CHAPTER IV

RESULTS

Characteristics of the Sample

Of the 100 questionnaires that were distributed, a total of 68 were returned. Subjects' responses to entire subtests were deleted if any of the admissibility criteria (see Chapter Three, p. 48) were not met. This deletion resulted in n's of 54, 51, 59, and 48 for the four subtests respectively. The demographic characteristics of the total sample and four sub-samples are presented in Tables 1 (Sex), 2 (Age), and 3 (Education).

Table 1

Characteristics of the Total Sample and Four Sub-samples, by Sex

Sex	Total Sample	Subtest One	Subtest Two	Subtest Three	Subtest Four
	N (%)	N (%)	N (%)	N (%)	N (%)
Male	29(42.6)	19(35.2)	21(41.2)	23(39.0)	16(33.3)
Female	39(57.4)	35(64.8)	30(58.8)	36(61.0)	32(66.7)
n	68	54	51	59	48

Table 2

Characteristics of the Total Sample and Four Sub-samples, by Age

Age	Total Sample	Subtest One	Subtest Two	Subtest Three	Subtest Four
	N (%)	N (%)	N (%)	N (%)	N (%)
A. Under 20	12(17.6)	10(18.5)	11(21.6)	11(18.6)	9(18.8)
B. 21-30	37(54.4)	30(55.6)	29(56.9)	33(55.9)	28(58.3)
C. 31-40	8(11.8)	6(11.1)	8(15.7)	7(11.9)	5(10.4)
D. 41-50	2(02.9)	1(01.9)	0(00.0)	1(01.7)	1(02.1)
E. 51-60	7(10.3)	6(11.1)	2(03.9)	6(10.2)	5(10.4)
F. 61-70	2(02.9)	1(01.9)	1(02.0)	1(01.7)	0(00.0)
n	68	54	51	59	48
Median Class	B	B	B	B	B
Modal Class	B	B	B	B	B

Table 3

Characteristics of the Total Sample and Four Sub-samples, by Education

Highest Education	Total Sample	Subtest One	Subtest Two	Subtest Three	Subtest Four
	N (%)	N (%)	N (%)	N (%)	N (%)
A. Less than Gr. 10	1(01.5)	1(01.9)	1(02.0)	1(01.7)	0(00.0)
B. Some high school	6(08.8)	5(09.3)	5(09.8)	6(10.2)	5(10.4)
C. High school grad	7(10.3)	7(13.0)	5(09.8)	7(11.9)	6(12.5)
D. Some college, tech school, or university	22(32.4)	17(31.5)	15(29.4)	19(32.2)	14(29.2)
E. College or technical school grad	7(10.3)	6(11.1)	6(11.8)	6(10.2)	5(10.4)
F. University grad (Bachelors)	15(22.1)	11(20.4)	12(23.5)	13(22.0)	12(25.0)
G. Some post-grad	3(04.4)	2(03.7)	2(03.9)	2(03.4)	2(04.2)
H. Post-grad degree	7(10.3)	5(09.3)	5(09.8)	5(08.5)	4(08.3)
n	68	54	51	59	48
Median Class	D	D	D	D	D
Modal Class	D	D	D	D	D

Description of the Data

A subject's responses to an entire subtest were included if all of the following criteria were met:

1. the moral action choice designated *a priori* as the prosocial action was endorsed by the subject,
2. the subject's responses to all questions were complete and clearly marked,
3. the subject's moral justification was scoreable by both judges.

The numbers and percentages of subjects failing to meet the above criteria for each subtest are presented in Table 4.

Table 4

Characteristics of Deleted Data

Reason for Deletion	Subtest One	Subtest Two	Subtest Three	Subtest Four
	N (%)	N (%)	N (%)	N (%)
Did not endorse the experimenter-defined prosocial action	3(04.4)	5(07.4)	2(02.9)	7(10.3)
Missing data	4(05.9)	5(07.4)	4(05.9)	4(05.9)
Moral judgment unscoreable	7(10.3)	7(10.3)	3(04.4)	9(13.2)
Total deleted	14(20.6)	17(25.1)	9(13.2)	20(29.4)

Reliability of Ratings

Two judges independently and blindly rated the subjects' moral justifications using criteria based on Kohlberg's six-stage model (see Appendix C). Pearson correlations were calculated to determine the inter-rater reliabilities of these judgments.

Table 5

Inter-rater Reliability Coefficients

for Each Subtest

Subtest	r	n
One	.889	54
Two	.772	51
Three	.933	59
Four	.877	48
Average	.868	

The results shown in Table 5 indicate that inter-rater reliabilities ranged from .77 to .93 with an average of .87. These results are comparable to inter-rater reliability coefficients obtained in other studies (Candee, 1976; Crockenberg & Nicolayev, 1979; Dell & Jurkovic, 1978; Hogan & Dickstein, 1972; Rubin & Trotter, 1977; Santrock, 1975), and are considered adequate.

Major Questions: Results

Relationship Between Moral Reasoning Level and Prosocial Action

The first major question that was investigated with respect to each of Subtests One through Four was whether a relationship existed between level of moral reasoning and prosocial behavior. This question was tested against null hypotheses which predicted a zero correlation between level of moral reasoning and prosocial behavior.

Subtest One. The Pearson correlation calculated between the measures of moral reasoning and prosocial behavior in Story One was .043 (df = 53, p = 0.76, two-tailed). Therefore Null Hypothesis One was not rejected at the $p < .05$ level of significance.

Subtest Two. The Pearson correlation calculated between the measures of moral reasoning and prosocial behavior in Story Two was -.244 (df = 50, p = 0.08, two-tailed). Therefore Null Hypothesis Two was not rejected at the $p < .05$ level of significance.

Subtest Three. The Pearson correlation calculated between the measures of moral reasoning and prosocial behavior in Story Three was .138 (df = 58, p = 0.30, two-tailed). Therefore Null Hypothesis Three was not rejected at the $p < .05$ level of significance.

Subtest Four. The Pearson correlation calculated between the measures of moral reasoning and prosocial behavior in Story Four was .184 (df = 47, p = 0.21, two-tailed). Therefore Null Hypothesis Four was not rejected at the $p < .05$ level of significance.

Effects of Additional Variables

The second major question investigated with respect to each of Subtests One through Four was whether inclusion of subjects' responses to other variable measures (in addition to moral reasoning level) would increase the accuracy of prediction of prosocial behavior.

Subtest One. Table 6 presents a summary of the results of a multiple regression analysis that was performed on the Subtest One data. While moral reasoning level accounted for virtually none of the variance in prosocial behavior (0.19%) the addition of the variable Importance to Other increased accounted for variance to approximately 18%. Therefore, Null Hypothesis Five was rejected at the $p < .05$ level of significance.

Subtest Two. Table 7 presents a summary of the results of a multiple regression analysis that was performed on the Subtest Two data. While moral reasoning level accounted for a non-significant proportion of the variance in prosocial behavior (nearly 6%), the addition of the variable Sacrifice increased the accounted for variance to almost 33%. Therefore, Null Hypothesis Six was rejected at the $p < .05$ level

Table 6

Subtest One: Multiple Regression Summary Table

(Variables 2-6 entered step-wise following inclusion of Variable 1)

Variable	Simple R	Multiple R	Multiple R^2	Increment[1] F	Increment[1] P	Cumulative F	Cumulative P
Moral Reasoning	.043	.043	.0019	-	-	0.098	ns
Importance to Other	.431	.431	.1858	11.506	**	5.817	**
Responsibility	.324	.446	.1989	0.825	ns	4.139	**
Importance to Self	.267	.451	.2039	0.303	ns	3.137	*
Sacrifice	-.081	.453	.2048	-	ns	2.437	*
Effectiveness	.301	.453	.2052	-	ns	2.023	ns

[*] significant at $p < .05$

[**] significant at $p < .01$

[1] Calculated using Cohen's (1968) formula (see following)

Table 6 (Continued)

$$F = \frac{(R^2_{Y \cdot A,B} - R^2_{Y \cdot A})/b}{(1 - R^2_{Y \cdot A,B})/(n-a-b-1)}$$

with df=b and (n-a-b-1), where:

$R^2_{Y \cdot A,B}$ is the incremented R^2 based on a+b independent variables,

$R^2_{Y \cdot A}$ is the smaller R^2 based on only a independent variables,

a and b are the number of original (a) and added (b) independent variables, hence the number of df each "takes up".

Table 7

Subtest Two: Multiple Regression Summary Table

(Variables 2-6 entered step-wise following inclusion of Variable 1)

Variable	Simple R	Multiple R	Multiple R^2	Increment[1]		Cumulative	
				F	P	F	P
Moral Reasoning	-.244	.244	.0594	-	-	3.095	ns
Sacrifice	-.474	.572	.3268	19.100	**	11.650	**
Responsibility	.323	.616	.3790	3.954	ns	9.563	**
Importance to Other	.246	.617	.3805	-	ns	7.064	**
Effectiveness	.189	.618	.3819	-	ns	5.560	**
Importance to Self	.298	.619	.3834	-	ns	4.559	**

*significant at $p < .05$

**significant at $p < .01$

[1] Calculated using Cohen's (1968) formula, (see Table 6, p. 60-61)

of significance.

Subtest Three. Table 8 presents a summary of the results of a multiple regression analysis that was performed on the Subtest Three data. While moral reasoning level accounted for a non-significant proportion of the variance in prosocial behavior (nearly 2%), the addition of the variables Responsibility, and Effectiveness increased the accounted for variance to nearly 33%. Therefore, Null Hypothesis Seven was rejected at the $p < .05$ level of significance.

Subtest Four. Table 9 presents a summary of the results of a multiple regression analysis that was performed on the Subtest Four data. While moral reasoning level accounted for a non-significant proportion of the variance in prosocial behavior (approximately 3%), the addition of the variables Importance to Self, Sacrifice, and Importance to Other increased the accounted for variance to 66%. Therefore, Null Hypothesis Eight was rejected at the $p < .05$ level of significance.

Secondary Questions: Results

While it was necessary for conceptual reasons to analyze the responses to the four situations separately, some integration of the findings was considered as a secondary objective of the present study.

Table 8

Subtest Three: Multiple Regression Summary Table

(Variables 2-6 entered step-wise following inclusion of Variable 1)

Variable	Simple R	Multiple R	Multiple R^2	Increment[1]		Cumulative	
				F	P	F	P
Moral Reasoning	.138	.138	.0192	-	-	1.113	ns
Responsibility	.512	.514	.2645	18.684	**	10.068	**
Effectiveness	.325	.570	.3252	4.948	*	8.834	**
Sacrifice	-.290	.577	.3335	0.689	ns	6.756	**
Importance to Self	.261	.579	.3350	-	ns	5.341	**
Importance to Other	.133	.579	.3353	-	ns	4.371	**

*significant at $p < .05$
**significant at $p < .01$

[1] Calculated using Cohen's (1968) formula, (see Table 6, p. 60-61)

Table 9

Subtest Four: Multiple Regression Summary Table

(Variables 2-6 entered step-wise following inclusion of Variable 1)

Variable	Simple R	Multiple R	Multiple R^2	Increment[1]		Cumulative	
				F	P	F	P
Moral Reasoning	.184	.184	.0338	-	-	1.611	ns
Importance to Self	.660	.666	.4434	33.113	**	17.928	**
Sacrifice	-.592	.789	.6218	22.127	**	24.110	**
Importance to Other	.229	.814	.6633	5.304	*	21.178	**
Effectiveness	.416	.822	.6756	1.588	ns	17.491	**
Responsibility	.566	.827	.6839	-	ns	14.781	**

*significant at $p < .05$

**significant at $p < .01$

[1] Calculated using Cohen's (1968) formula, (see Table 6, p. 60-61)

Degree of Prosocial Responding Across Subtests

The first question posed was whether the degree of prosocial responding was similar across situations. Essentially, the data were combined as in a single-factor experiment with repeated measures. An analysis of variance with repeated measures was used to test the null hypothesis of equal means across the four subtests. (Note: for this analysis only, data were used from all subjects who endorsed the prosocial alternative and who had completed the behavioral measure question on all four subtests. That is, subjects who had previously been deleted owing to unscoreable moral justifications, or incomplete or unclearly marked questionnaires were included in this analysis.) The means and standard deviations for the measures of prosocial behavior were as follows: Subtest One $\bar{x} = 3.86$, sd = 1.24; Subtest Two $\bar{x} = 3.79$, sd = 0.87; Subtest Three $\bar{x} = 4.45$, sd = 0.89; Subtest Four $\bar{x} = 3.57$, sd = 1.08, ($n = 56$).

As indicated in Table 10, there was a statistically significant effect due to subtests, $F(3,165) = 8.345$, $p < .01$. Therefore, Null Hypothesis Nine was rejected at the $p < .05$ level of significance.

Following an analysis of variance, a Newman-Keuls comparison between ordered means was applied. The mean score of the behavioral measure in Subtest Three was found to be significantly different from the mean scores of the behavioral measures in Subtests One, Two, and Four ($p < .01$); differences between other pairs of behavioral measures were non-significant at the $p < .05$ level.

Table 10

Analysis of Variance Summary Table

for Behavioral Measure Responses across Four Subtests

($n = 56$)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	786.388	55	14.298	
Treatments (subtests)	235.488	3	78.496	8.345**
Interaction	1552.013	165	9.406	
Total	2573.888			

**significant at $p < .01$

Relation of the Independent Variables to Prosocial Action Across Subtests

The final question that was posed in the present study was whether the variables related to prosocial action in one situation were of similar relative importance to prosocial action in a different situation. The Pearson correlation coefficients between each independent variable and the dependent variable are presented in Table 11. By chance, 1.2 significant correlations might be expected; the results in Table 11 revealed 15 significant findings.

As can be seen, there was very little consistency in the relative importance of the independent variables that predicted prosocial behavior across the four different situations. In fact, when the correlation coefficients were rank ordered, and these ranks compared for each of the six possible pairs of story combinations via Kendall's tau, none of the taus were significant at the $p < .05$ level (see Table 12).

Table 12

Relationships (tau) between the Ranks of the Independent Variable-Dependent Variable Correlation Coefficients for Each Pair of Subtests

Subtest	1	2	3	4
1	-	.067	.200	-.067
2		-	.333	.600
3			-	.200

Since the mean value of tau was .245 ($p > .05$), Null Hypothesis Ten was not rejected.

Table 11

Pearson Correlations Between the Independent Variables and the Dependent Variables Across Four Subtests

Variable	Prosocial Action Subtest One	Prosocial Action Subtest Two	Prosocial Action Subtest Three	Prosocial Action Subtest Four
Moral Reasoning	.04	-.24	.14	.18
Responsibility	.32*	.32*	.51**	.57**
Effectiveness	.30*	.19	.32*	.42**
Sacrifice	-.08	-.47**	-.29*	-.59**
Importance to Self	.26*	.30*	.26*	.66**
Importance to Other	.43**	.25	.13	.23
n	54	51	59	48

*significant at $p < .05$

**significant at $p < .01$

Post Hoc Analyses

Characteristics of the Four Subtests

In order to identify the perceived characteristics of each scenario, the mean rating of each subtest variable was calculated and compared across subtests via analysis of variance with repeated measures, and across pairs of subtests via the Newman-Keuls procedure. The results of these analyses are presented in Table 10 and Appendix D, and summarized below in Table 13. (Note: for these analyses, subjects with missing data were deleted list-wise for each variable, resulting in an n of 35 for Moral Reasoning, and n's of 56 for the remaining variables.) On the basis of these analyses, the following story characterizations were developed.

Subtest One. Subtest One consisted of subjects' responses to the hypothetical scenario entitled "The Tax Problem", (see Appendix B). Inspection of Table 13 suggested that factors which would strengthen, or counter-influence subjects' moral prescriptions to pay their full taxes may have been operative.

Factors operating against the payment of tax were:

1. payment would involve considerable sacrifice,
2. relatively little personal responsibility was felt for supporting the government through taxes,
3. the average subject regarded the personal payment of tax as having relatively little effect on the well-being of the country.

Table 13

Summary of Analyses of Variance and Newman-Keuls Performed on Responses to each Variable

Variable	Subtest			
1. Moral Reasoning (n = 35)	2*	3*	4*	1
2. Responsibility (n = 56)	3**	1	4	2
3. Effectiveness (n = 56)	3**	2*	4	1
4. Sacrifice (n = 56)	1*	3	2	4
5. Importance to Self (n = 56)	3**	1**	2*	4*
6. Importance to Other (n = 56)	3**	2**	4*	1*
7. Prosocial Behavior (n = 56)	3**	1*	2*	4*

*mean response > 3.0

**mean response > 4.0

Note: (1) Subtests arranged from highest to lowest with respect to mean rating.
(2) Subtests underscored by a common line do not significantly differ, based on Newman-Keuls.
(3) For complete ANOVAs and Newman-Keuls, see Appendix D (Variables 1-6) and Table 10 (Variable 7).

Factors operating for the payment of tax were:

1. the average subject regarded the well-being of the country as highly important to him/herself,
2. the average subject felt that it was moderately important to the country as a whole that he/she personally pay full taxes.

Subtest Two. Subtest Two consisted of subjects' responses to the hypothetical scenario entitled "The Employment Program", (see Appendix B). On the basis of the findings presented in Table 13, there seemed to be only one factor operating against the employment of an ex-con: the relative lack of personal responsibility felt for the ex-cons described. On the other hand, a number of factors appeared to favor the hiring of an ex-con:

1. the hiring of an ex-con was perceived as an effective action in bettering the ex-con's condition,
2. the employment of an ex-con involved little sacrifice to the average subject,
3. the average subject felt that an ex-con would attach great importance to being hired personally by the subject,
4. the average subject placed moderate importance on the well-being of the ex-cons.

Subtest Three. Subtest Three consisted of subjects' responses to the hypothetical scenario entitled "Kidney Donation", (see Appendix B). Inspection of Table 13 suggested that the Subtest Three scenario was perceived as markedly different from the others. Virtually no factors seemed operative which would counter-influence the prescription to donate a kidney. On the contrary, a number of factors appeared to have strengthened the moral decision to donate: a sense of personal responsibility for the well-being of one's sister; the perception that the donation would be highly effective in bringing about the well-being of one's sister; the importance that the average subject attached to the well-being of his/her sister; the feeling that it was highly important to the sister that the subject personally make the donation; the perception that a kidney donation would involve only moderate sacrifice to the subject.

Subtest Four. Subtest Four consisted of subjects' responses to the hypothetical scenario entitled "Aid to Refugees", (see Appendix B). In this subtest, as in Subtest One, there appeared to have been factors which would strengthen and counter-influence the performance of prosocial action.

Factors operating against volunteering behavior were:

1. relatively little personal responsibility was felt for the well-being of the refugees,
2. the average subject regarded the volunteering of time as relatively inconsequential insofar as the well-being of the refugees was concerned.

Factors operating for volunteering behavior were:

1. volunteering was perceived as involving little personal sacrifice,
2. the average subject regarded the well-being of refugees as moderately important to him/herself,
3. the average subject felt that it was moderately important to the refugees that he/she personally volunteer aid.

Summary. The above analyses made possible descriptive characterizations of the scenarios. Scenario Three was identified as distinct from the others, with all variable dimensions perceived in a manner which would encourage prosocial responding. This observation concurred with the finding that the liklihood of prosocial behavior in Subtest Three was significantly greater than in the other subtests.

Relationship between Moral Reasoning and Prosocial Action

It was suggested in Chapter Two that the correlations reported by previous studies which investigated the structure of reasoning-behavior relationship may have been spurious since the effects of content of moral reasoning were not controlled for. The present study controlled for the effects of content of moral reasoning by retaining the data from only those subjects who endorsed a common course of action. When the moral reasoning levels of these subjects were correlated with measures of prosocial behavior, nonsignificant relationships were found for all four subtests.

A further question of interest was whether significant correlations would result if the data from all subjects (i.e., those who chose the prosocial course of action, and those who chose the alternative action) were collapsed. Post hoc analysis via Pearson correlations indicated that although the correlations did increase for all subtests, none of these values reached significance at the $p < .05$ level (see Table 14, row B).

Table 14

Correlations between Structure of Moral Reasoning, Content of Moral Reasoning, and Prosocial Action across Four Subtests

Relationship	Subtest 1	2	3	4
A. Structure-Behavior (Subjects not endorsing prosocial action were deleted, see Note 1)	.04	-.24	.14	.18
B. Structure/Content-Behavior (Data from all subjects collapsed, see Note 2)	.08	-.13	.19	.24
C. Structure-Content[2]	.17	.37*	.15	.22
D. Content-Behavior[2]	.23	.28*	.45*	.45*

*$p < .05$

Note: (1) n's = 54, 51, 59, 48
(2) n's = 57, 56, 61, 55

Correlations between structure and content of moral reasoning, and between content of moral reasoning and prosocial behavior were also computed and are presented in Table 14. In three out of four subtests, content was significantly related to behavior ($p < .05$). A more noteworthy finding was that in all cases, the correlation between structure and content was higher than the correlation between structure and behavior. While the magnitudes of these differences caution against conclusive statements, this finding does suggest that content of moral reasoning may be an important variable to be considered in future investigations of the reasoning-behavior relationship.

Further Syntheses of Findings across Subtests

Although some syntheses of the findings across subtests were achieved in the testing of Null Hypotheses Nine and Ten, two further questions were posed for post hoc investigation. First, it was questioned whether the variables presently investigated possessed personological qualities. Secondly, it was questioned whether an underlying pattern of relationships existed between variables, such that the data from the four subtests could be reduced to a more manageable and interpretable level. (Note: for both of these investigations, subjects with missing data were deleted list-wise across variables, resulting in $n = 35$ for all calculations.)

Do the variables possess personological qualities? Stated in another way, this question focussed on whether for example, subjects who felt highly responsible in one situation would tend to feel highly responsible in other situations. To answer this question, intercorrelations were computed between each variable and "itself" across the four subtests, (see Table 15). While a greater than chance number of significant correlations resulted, these coefficients were not linked to any particular variable. An examination of the patterns of significant correlations in Table 15 suggested that subjects were not consistent with respect to any of the variables across the four prosocial behavioral situations that were investigated.

Determination of patterns of relationships. To determine if an interpretable pattern of relationships existed among the 28 variables from the four subtests, an exploratory factor analysis was conducted. The results of a principal-component analysis with varimax rotation are presented in Table 16. The first factor accounted for 33.6% of the total variance, and was clearly composed of the variables related to Subtest Four. Factor II, accounting for 21.0% of the variance, was somewhat less clear. However, five of the ten variables which had a loading higher than ±.30 on that factor were Subtest Two variables; hence, Factor II was interpreted as representing Subtest Two. The third factor accounted

Table 15

Intercorrelations of each Variable
across Four Subtests
(n = 35)

(a) Moral Reasoning

Subtest:	1	2	3	4
1	-	.37*	-.04	.15
2	-	-	.05	.25
3	-	-	-	.01

(b) Responsibility

Subtest:	1	2	3	4
1	-	.07	.05	.05
2	-	-	-.05	.36*
3	-	-	-	-.07

(c) Effectiveness

Subtest:	1	2	3	4
1	-	.14	.16	.11
2	-	-	.14	.00
3	-	-	-	-.21

Table 15 (Continued)

(d) Sacrifice

Subtest:	1	2	3	4
1	-	.05	.15	.45*
2	-	-	.06	-.33*
3	-	-	-	-.01

(e) Importance to Self

Subtest:	1	2	3	4
1	-	.21	.25	.07
2	-	-	.15	.14
3	-	-	-	.40*

(f) Importance to Other

Subtest:	1	2	3	4
1	-	.37*	.31	.39*
2	-	-	.43*	.09
3	-	-	-	.15

(g) Prosocial Action

Subtest:	1	2	3	4
1	-	-.02	.31	.32
2	-	-	-.06	-.10
3	-	-	-	.37*

$^{*}P < .05$

Table 16

Varimax Rotated Factor Matrix

(n = 35)

Variable	Factor I	II	III	IV	V
AMR			584		
AResp			744		
AEffec			683		
ASacr			-532		
AImpS			477	507	
AImpO		337	650		-370
AAct		420	314		
BMR				323	432
BResp		647			
BEffec					620
BSacr		-335			-325
BImpS		876			
BImpO		547			
BAct		351			
CMR					
CResp				718	
CEffec			412	340	
CSacr				-319	642
CImpS	350			552	
CImpO		573			
CAct		358		724	
DMR				433	
DResp	710	398			
DEffec	650				
DSacr	-731				
DImpS	706				
DImpO			386		-409
DAct	859				
% Variance	33.6%	21.0%	17.9%	13.9%	13.6%

Note: (a) First letter of variable label denotes subtest: A=1, B=2, C=3, D=4; MR=Moral Reasoning; Resp=Responsibility; Effec=Effectiveness; Sacr=Sacrifice; ImpS=Importance to Self; ImpO=Importance to Other; Act=Prosocial Action.

(b) Decimal points omitted.

for 17.9% of the variance, and clearly corresponded to Subtest One variables. Factor IV accounted for 13.9% of the variance and was clearly composed of the variables related to Subtest Three. Finally, Factor V (13.6% of the total variance) could not be interpreted in a meaningful way.

CHAPTER V

SUMMARY AND DISCUSSION

Summary

The general aim of the present study was to determine under what conditions prosocial behaviors were likely to be performed. The conditions investigated included moral reasoning level, and measures of perceived responsibility, sacrifice, effectiveness, importance to self, and importance to other.

The first problem investigated was the relationship between prosocial behavior and structure of moral reasoning. Unlike previous investigations of this relationship, the present study (1) controlled for the possibly confounding effect of content of moral reasoning by examining only those responses from subjects who advocated a common course of action, and (2) assessed moral reasoning levels in response to the same situations in which behaviors were assessed, thereby relinquishing the assumption of consistency of moral reasoning and acknowledging the importance of subjects' perceptions of the situations. Using this approach, the Pearson correlations between structure of moral reasoning and prosocial behavior were non-significant in all four subtests. Post hoc analyses indicated that when the moral reasoning levels of subjects who differed in terms of their moral choices (content) were correlated with measures of behavior, coefficients increased slightly but nevertheless failed to reach significance.

The second question investigated was whether consideration of five measures of perceived situational characteristics would enable one to predict the performance of prosocial behaviors more accurately than on the basis of moral reasoning level alone. The effects of these additional variables were examined using a step-wise multiple regression technique. In all four subtests, the inclusion of additional variables significantly increased the proportion of accounted for variance in prosocial behavior.

While the above analyses were conducted separately on the data of each subtest, some synthesis of the findings across subtests was considered as a secondary objective. First, it was questioned whether prosocial behavior was more likely to occur in some situations as compared to others. An analysis of variance comparing the mean level of prosocial responding across the four subtests found significant differences; more specifically, prosocial responding in Subtest Three (Kidney Donation) was significantly higher than in the other three subtests. Post hoc analyses of variance comparing the mean ratings for each independent variable across the four subtests also found the third scenario to be distinct from the others, with all variables perceived in a manner which would encourage prosocial action (see Chapter Four, pp. 70-74).

A second secondary objective was to determine whether the independent variables assumed similar relative importance with respect to prosocial behavior across the four subtests. A comparison of the ranks of the independent variable-dependent variable Pearson correlations for each subtest pair (via Kendall's tau) indicated that the patterns of correlations were not similar across situations.

Finally, two additional post hoc analyses were conducted to further synthesize the results across the four subtests. First, intercorrelations of each variable with "itself" across the four subtests suggested little intra-individual consistency in situation perception. Secondly, a factor analysis performed on the data from the four subtests yielded five factors, the first four of which were clearly associated with one of the subtests.

Discussion

The Relationship between Moral Reasoning and Prosocial Action

The results failed to find evidence for a relationship between structure of moral reasoning and prosocial behavior in any of the situations investigated. Taken by itself, this finding suggested that the significant correlations that had been reported by previous studies may have been spurious, and in part attributable to the effect of content of moral reasoning. However, when content of moral reasoning was disregarded in the present study (i.e., when data from subjects who differed in their action choices were collapsed and their moral reasoning levels related to prosocial action), correlations still failed to reach significance. In view of this additional finding, the above suggestion seemed equivocal. It is unclear why a relationship between moral reasoning (with content uncontrolled for) and prosocial behavior was not found here, particularly since such a relationship seemed generally accepted in the literature. One possible explanation was that the proportion of subjects not endorsing the experimenter-defined prosocial action was small (the average percentage of subjects choosing the non-prosocial alternative was 6.25). This explanation seems plausible in view of the fact that the correlation in Subtest Four (in which the largest percentage, i.e., 10.3%, of the subjects did not endorse the experimenter-defined prosocial action) approached significance ($p = .07$). A second possible explanation was that the test of moral reasoning used in the present study may not have been comparable to the traditionally used tests. In a survey of studies which investigated reasoning-behavior relationships, Blasi (1980) found that many of the investigations which yielded negative results had used author-constructed tests of moral reasoning. Further investigation of this problem using more controversial and/or traditional scenarios seems warranted.

Finally, the suggestion that content of moral reasoning be regarded as an important factor in the reasoning-behavior relationship received inconclusive, but suggestive support in the present study. Post hoc intercorrelations between structure, content, and behavior indicated that in three out of four cases content was significantly related to behavior, and more interestingly, that in all cases the relationship between structure and content was stronger than the relationship between structure and behavior (see Table 14).

Effects of Additional Variables

In each of the four subtests, the inclusion of variables in addition to moral reasoning level significantly increased the proportion of variance accounted for in prosocial action. Following the addition of the first (i.e., most powerful) variable in each multiple regression analysis, an average of 27.6% of the variance in prosocial behavior was accounted for, over and above the proportion accounted for by moral reasoning level alone. Following the inclusion of all six independent variables, between 20.5% and 68% ($\bar{x}$ = 40%) of the variance in prosocial behavior was accounted for (see Tables 6-9). These findings strongly supported the use of a multivariate approach in the study of prosocial behavior.

Having acknowledged the importance of a multivariate approach, a further task would be to identify the set of variables most consistently related to prosocial action, so that in future investigations, the nature and function of these variables may be studied more thoroughly. While the findings of the present study do offer suggestions in this regard, few conclusive statements can be made. Two of the variables (Responsibility, Importance to Self) were significantly correlated with prosocial behavior in all situations, and two variables (Effectiveness, Sacrifice) were significantly related to prosocial action in three of the four situations. These four variables would appear to be promising candidates for further investigation.

However, these are clearly not the only variables which could be studied in relation to prosocial behavior. For example, although the fifth variable (Importance to Other) was non-significantly correlated with prosocial action in three situations, it proved to be the most powerful predictor in the fourth situation (The Tax Problem). As well, it should be noted that an average of 60% of the variance in prosocial behavior was left unaccounted for by the six independent variables presently studied. Hence, the need for identifying other variables is obvious.

One result of the factor analysis that was conducted on the full set of 28 variables deserves mention here. In three out of four situations, moral reasoning level assessed in response to Situation X was found to be orthogonal to the factor which was predominantly composed of Situation X's other five independent variables and dependent variable. Stated in another way, moral reasoning level was found to be unrelated to the perceived situational characteristics and, more importantly, unrelated to prosocial action. While the present study's findings regarding the reasoning-behavior relationship were not definitive (as was discussed in the previous section), these findings do cause one to question the emphasis that has in the past, been placed on moral reasoning.

Situational, Personological, or Interactional?

The findings that the independent variables were of differential importance to prosocial behavior across the four situations, and that the factor analysis clustered variables together on the basis of subtest, appeared to provide support for the situationist point of view. However, such a conclusion is not warranted on the basis of this investigation. It should be emphasized that the variables which were shown to be related to prosocial action were measures of how individual subjects perceived the situational characteristics -- not measures of a priori defined situational characteristics, or mean ratings of situational characteristics.

Thus, in all measures, personological factors were confounded with situational ones. (Ironically, the results of the factor analysis may be interpreted as suggesting support for the importance of the "person". In the absence of any clear rationale for why the independent variables should be expected to group together by situation for all subtests, one is tempted to speculate that some active, organizing agent -- i.e., the "person" in the particular situation -- may have been the basis for the observed coherence. This of course, is speculative.)

Further evidence which challenged the situationist perspective was the importance of considering individual differences in situation perception which can be demonstrated by an examination of the variability between subjects' responses. For example, in Subtest One, "The Tax Problem", approximately 20% of the subjects perceived the "loss" of $700 as involving little or no sacrifice, despite the fact that the mean Sacrifice score in that subtest was higher than in the other three situations. This example illustrates the point made in Chapter Two concerning the problems in assuming inter-subject similarity in the perception of experimental treatments. For one-fifth of the subjects in this sample, the "manipulation" of degree of sacrifice would not have been effective. Similarly, in Subtest Four, "Aid to Refugees", 10% of the subjects felt that not volunteering assistance was the "moral thing to do". Therefore, in investigations of the degree to which people act in accordance with their moral prescriptions, measures of the degree of volunteering behavior would have been an inappropriate test for one in ten subjects.

The results of the present study also challenged several aspects of the personological paradigm. First, the finding that the patterns of variables related to prosocial action across situations were dissimilar, raised some doubt regarding the nomothetic assumption. Secondly, it was found that subjects did not display trans-situational consistency with respect to the independent variables studied, nor was there evidence that subjects were consistent in their performance of what the investigator had classified as "prosocial behaviors", (see Table 15).

The relative success in accounting for variance in prosocial behavior in the present study was attributed to the use of perceived measures which take into account both person and situation factors. Of the 20 correlations between perceived situational characteristics and prosocial action, 7 were significant at the $p < .01$ level, and an additional 8 were significant at the $p < .05$ level, (see Table 11). The average variance accounted for by all perceived situational variables was 12%, and by the significant ($p < .05$) ones, 16%. These proportions compare favorably with those reported by Sarason, *et al.*, (1975) who, in their review of 102 studies, estimated that the average variance accounted for by a situational variable was 10.3% and by a personological variable, 8.7%.

Conclusion

While advocating a person x situation interactionist orientation, the present writer appreciates the complex model of human behavior that is implied by this approach. In fact, the model becomes so complex that one wonders if psychologists are not faced with the impossible task of studying an infinite number of persons as they interact with an infinite number of situations. Is the fate of psychologists to simply describe the behaviors of individual persons in isolated situations? Perhaps optimistically, the present writer thinks not. An important task will be to construct a taxonomy of situations so that general situational characteristics may be studied interactively with general personological factors. Hopefully, the end product of this enormous task will be a better understanding of human behavior.

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APPENDIX A

INSTRUMENT DESIGN

For the purposes of investigating the particular questions posed in the present study, a test instrument was required which would portray a conflict situation to which subjects would respond with (1) their moral choices and justifications, and (2) their perceptions of the situation. One alternative was to use already developed scenarios (for example, those provided by Boyce & Jensen, 1978; Kohlberg, 1958, 1963; or Rest, 1979) to which further questions pertinent to this study could be added. However, one of the concerns of the present author was to select scenarios which would (1) portray the subject as the principal actor, i.e., rather than as a third party, (2) be plausible within the range of typical experience, and (3) be appropriate for use with adult subjects. Because of these criteria, it was necessary to construct an instrument for the specific purposes of this study.

Following, are the considerations which guided the selection of scenarios and scales, and the format of the test instrument.

Selection of Scenarios

Traditional tests of moral judgment have typically requested subjects to pass a "third party" judgment on the conduct of two persons whose interests and circumstances are portrayed in a hypothetical scenario. Not infrequently, these conflict situations are out of the range of normal adult experience owing to their unusualness, or their appropriateness for only a select age or role-group. For the purposes of measuring only moral reasoning, such scenarios would seem appropriate since one is interested -- in a sense -- in assessing an abstract, rational function.

However, if one is interested in how people think and behave in usual situations, and if one wishes to assess subjects' perceptions of the situation along what might loosely be termed as "affective" dimensions, then more realistic and personally engaging scenarios would seem preferable. Hence, the general criteria of personality (as opposed to impersonality), plausibility, and appropriateness were adopted.

Four different subtests were developed and administered to each subject, so that some conclusions about prosocial behaviors "in general" might be possible. More specifically, subtests were constructed so that the type of action required of the subject, and the "psychological distance" of the person or group on whose behalf the subject was requested to act varied. It was anticipated that the "type of action" would have the greatest effect on the Importance to Other, Effectiveness, and Sacrifice variables, and that "psychological distance" would be primarily related to subjects' ratings of the Importance to Self, and Responsibility items.

The format of the scenarios was similar to that used by Boyce and Jensen (1978), Kohlberg (1958, 1963), and Rest

(1979). The contents of the scenarios were chosen because they represented issues and conflicts which an average adult in today's society might likely encounter. This focus on plausibility and appropriateness was considered important since the primary aim was to create situations in which subjects could clearly envisage themselves.

While the four scenarios were ostensibly different, the variations may have only been so in the researcher's mind, as was suggested in Chapter Two. One cannot be certain *a priori* how the scenarios were perceived by individual subjects, or by subjects as a group. In view of this, the question of whether the four scenarios were a representative sample of prosocial behavioral situations became unanswerable. (Further, the subtests cannot properly be termed "treatments". If one so wished, "treatments" must refer to each subject's differing perceptions across stories.)

Selection and Measurement of Independent Variables

Moral reasoning. The selection of the variable "Moral Reasoning", was motivated by the emphasis that has been placed on this variable in the literature, and at the same time, by the problems which this author noted in existing research. These difficulties were discussed in Chapter Two and will not be reiterated here.

The measurement of moral reasoning was accomplished by rating subjects' written justifications of the moral action choice they had endorsed, (see Appendix C for the rating criteria). This method of assessing moral reasoning was chosen primarily for practical reasons. More specifically, (1) an interview method with individualized probing was not considered feasible owing to the number of subjects required for a multivariate analysis, and to the importance of maintaining anonymity of subjects' responses, and (2) extended written justifications to four subtests were considered to be an unreasonable time demand to place on volunteer subjects.

Perceived situational characteristics. As was discussed in Chapter Two, the primary concern of the present study was on the manner in which variables were investigated; the nature of the variables was of secondary importance. The present study was based largely on the conviction that the use of perceived measures would resolve many of the problems inherent in both the situational and personological approaches.

The actual choices of the variables came as a result of inspection of the literature with respect to factors previously studied. The variable "Responsibility" (as a personological factor) had been studied extensively (Schwartz, 1973, 1977; Schwartz & Clausen, 1970; Staub, 1974). The calculation of costs of, and rewards for acting had received considerable attention from researchers based in the situationist perspective (see Chapter Two, pp. 28-29). The present study regarded effectiveness of action, sacrifice involved in acting, importance to the beneficiary that the action be performed by the actor, and importance to the actor that the well-being of the beneficiary be achieved, as four factors which might affect the cost-reward balance. As in the case of "Responsibility", these four variables were studied as perceived characteristics.

The variables were measured using five-point scales with verbal descriptions ranging from "none of" (1) to "a great deal of" (5). The scale directions were fixed across all variables in order to avoid the possibility of confusing subjects by calling on them to alternate their responses from left to right. While this procedure does not prevent the formation of a response set, Nunnally (1967) has argued that it is preferable to random assignment of direction on the basis of a decrease in measurement error.

Measurement of the Dependent Variable

The dependent variable (prosocial behavior) was measured by having subjects rate their (estimated) actual behavior on five-point scales ranging from "definitely would not perform" (1) to "definitely would perform" (5). Realistically speaking, behaviors are either performed, or they are not. However, a five-point scale was adopted on the suspicion that subjects would regard a two item, forced-choice question as overly restrictive, and not accurately reflective of their true behavioral estimations.

APPENDIX B

THE TEST INSTRUMENT

Department of Educational Psychology
Education Centre - North Wing
University of Alberta
Edmonton, Alberta, T6G 2G5

Dear Participant,

I am a graduate student in the Department of Educational Psychology at the University of Alberta. In conjunction with Dr. R. Schultz, I am conducting a study to determine the ways in which different people think, feel, and behave in various social situations. We very much appreciate your willingness to participate in this study.

Enclosed in this envelope, you will find a booklet containing four 'stories', and following each, a number of questions about the stories. The instructions for answering the questions are on the front page of the booklet. The questionnaire will take only about 30 minutes to complete. We expect that you will find the questions to be quite thought-provoking and enjoyable to answer. Your responses to the questionnaire are totally anonymous. However, we do ask that you indicate your age, sex, and highest level of education on the front page of the booklet.

Please fill-in and mail the questionnaire within 2-3 days of receiving it. All questionnaires must be mailed no later than June 17 in order to be included in the study.

If, after completing the questionnaire, you are interested in learning more about the study, we would be pleased to send you a summary of our results when they become available. Simply send a postcard, or telephone me at 432-3226, giving your name and address.

Again, thank-you very much for your participation in the study.

Yours truly,

Joy Eustace
M.Ed. (Candidate)

QUESTIONNAIRE

A. SEX:

___ Female
___ Male

B. AGE:

___ under 20
___ 21-30
___ 31-40
___ 41-50
___ 51-60
___ 61-70
___ over 70

C. HIGHEST EDUCATIONAL LEVEL:

___ less than Grade Ten
___ some high school
___ high school graduate
___ some college, university, or technical school
___ college or technical school graduate
___ university graduate (Bachelors degree)
___ some post-graduate training
___ post-graduate degree

****

INSTRUCTIONS

This booklet contains four "stories", each describing a hypothetical social situation. Following each story will be a number of questions. Question #1 asks you to decide which of two actions is most morally correct. Question #2 asks you to give reasons for your decision.

Questions 3-8 ask you to indicate your thoughts and feelings about a number of issues which relate to the story. You are to record your answers by circling the appropriate number on the scale below each question. DO NOT PLACE YOUR MARK BETWEEN THE NUMBERS.

You may find it difficult to answer some of the questions, but we ask that you answer all of them in some way.

Please do not discuss your responses with other people while you are filling-out the questionnaire. We expect that different people will respond differently to the various questions -- that is, there are no "right" or "wrong" answers. Therefore, please be as honest and accurate as you can in filling-out the questionnaire.

NOTE: When you have completed the questionnaire, please mail it back to me in the envelope provided, no later than June 17th.

THE TAX PROBLEM

Imagine that you are the breadwinner of a family. The time of year has come when you are required by law to pay taxes to the government. By chance, you have discovered a way in which you can lie about the amount of taxes you have to pay with a very little chance of getting caught. This method would save you about $700. Two people you work with say that they have been using this method for years, and haven't been caught. You start to think about lying on your taxes.

1. From a moral point of view, what should you do in this situation? (Circle one)

    a. I should lie about my taxes.
    *b. I should not lie about my taxes.

2. What are you reasons for making the choice that you did in Question #1? (Please explain as fully as possible using the other side of this page.)

Note: Questions 3-8 are concerned with how you, personally think and feel about a number of issues. Do not try to think of how a person ought to feel, or of how most people might feel. We are interested in your opinions. Remember, there are no right or wrong answers.

3. How great a sense of personal responsibility do you feel for supporting the government by paying taxes?

1 2 3 4 5

no responsibility — a great sense of responsibility

4. How great an impact do you feel your tax money has on the overall well-being of the country?

1	2	3	4	5
no impact				a great amount of impact

5. How great a sacrifice would it be to you if you paid this "extra" $700 tax?

1	2	3	4	5
no sacrifice				a great sacrifice

6. How important is the overall well-being of the country to you, personally?

1	2	3	4	5
not at all important				very important

7. How important do you think it is to the country as a whole, that you personally pay your full taxes?

1	2	3	4	5
not at all important				very important

8. Imagine yourself actually in this situation. What do you believe you actually would do?

1	2	3	4	5
definitely would lie	probably would lie	don't know	probably would not lie	definitely would not lie

---

*designated as the prosocial action choice

THE EMPLOYMENT PROGRAM

As you may be aware, people who are released from prison often "drift back to their old way of life" and frequently end up back in jail. Some people feel that this is because people with criminal records find it difficult to obtain jobs, and the pressures they encounter as a result of being ex-cons are too difficult to handle. There is a program operating in your province that attempts to encourage owners of small businesses to hire ex-cons, and to provide them with a favorable working environment in which they may "get back on their feet". The ex-cons they have chosen for this program are carefully screened and are believed to be sincerely motivated to "go straight". Suppose that you are an owner of a small business and the government has asked you to hire an ex-con as your next employee.

1. From a moral point of view, what should you do in this situation? (Circle one)

    *a. I should agree to hire an ex-con as my next employee.
    b. I should not agree to hire an ex-con as my next employee.

2. What are your reasons for making the choice that you did in Question #1? (Please explain as fully as possible using the other side of this page.)

Note: Questions 3-8 are concerned with how you, personally think and feel about a number of issues. Do not try to think of how a person ought to feel, or of how most people might feel. We are interested in your opinions. Remember, there are no right or wrong answers.

3. How great a sense of personal responsibility do you feel for the well-being of the ex-cons involved in this program?

1	2	3	4	5
no responsibility				a great sense of responsibility

4. How great an impact do you feel your employment of an ex-con would have on his chances of "going straight"?

1	2	3	4	5
no impact				a great amount of impact

5. How great a sacrifice would it be to you to employ an ex-con?

1	2	3	4	5
no sacrifice				a great sacrifice

6. How important is the well-being of the ex-cons in this program to you, personally?

1	2	3	4	5
not at all important				very important

7. How important do you think it is to an ex-con that you, personally hire him?

1	2	3	4	5
not at all important				very important

+8. Imagine yourself in this situation of being asked by the government to employ an ex-con. What do you believe you actually would do?

1	2	3	4	5
definitely would hire	probably would hire	don't know	probably would not hire	definitely would not hire

---

[*] designated as the prosocial action choice

[+] scale reversed for analyses

KIDNEY DONATION

Imagine that you have a sister who is suffering from a severe kidney ailment. Her doctors feel certain that she will die within the next two years unless she receives a healthy kidney. If she receives a kidney from a suitable donor, her doctors feel that she has a very good chance of recovering and resuming a normal life. Three people in your immediate family have been identified as suitable donors, and you are one of these three. Her doctors have asked if you will volunteer to donate one of your kidneys to your sister.

1. From a moral point of view, what should you do in this situation? (Circle one)

   *a. I should donate one of my kidneys.
   b. I should not donate one of my kidneys.

2. What are your reasons for making the choice that you did in Question #1? (Please explain as fully as possible using the other side of this page.)

Note: Questions 3-8 are concerned with how you, personally think and feel about a number of issues. Do not try to think of how a person ought to feel, or of how most people might feel. We are interested in your opinions. Remember, there are no right or wrong answers.

3. How great a sense of personal responsibility do you feel for the well-being of your sister?

1	2	3	4	5
no responsibility				a great sense of responsibility

4. How great an impact do you feel your donation would have on the well-being of your sister?

1	2	3	4	5
no impact				a great amount of impact

5. How great a sacrifice would it be to you if you made this donation?

1	2	3	4	5
no sacrifice				a great sacrifice

6. How important is the well-being of your sister to you, personally?

1	2	3	4	5
not at all important				very important

7. How important do you think it is to your sister that you, personally make this donation?

1	2	3	4	5
not at all important				very important

+8. Imagine yourself in this situation of being asked to donate a kidney to your sister. What do you believe you actually would do?

1	2	3	4	5
definitely would donate	probably would donate	don't know	probably would not donate	definitely would not donate

---

*designated as the prosocial action choice

+scale reversed for analyses

AID TO REFUGEES

As you know, there are hundreds of thousands of starving and impoverished refugees throughout the world today. The Red Cross in your community is active in providing relief to these refugees by sending food, clothing, money, and medical supplies. Recently, the Red Cross has begun a campaign to attract volunteers. Specifically, they are requesting that volunteers pledge one evening (4 hours) per month of their time to perform such tasks as: collecting food, money, and clothing donations from various depots throughout the city, and sorting and packaging these items for delivery to refugee camps in various parts of the world. The Red Cross is conducting a door-to-door canvass in your neighborhood to enlist volunteers.

1. From a moral point of view, what should you do when the Red Cross canvasser comes to your door? (Circle one)

   a. I should not volunteer to help.
   *b. I should volunteer to help.

2. What are your reasons for making the choice that you did in Question #1? (Please explain as fully as possible using the other side of this page.)

Note: Questions 3-8 are concerned with how you, personally think and feel about a number of issues. Do not try to think of how a person ought to feel, or of how most people might feel. We are interested in your opinions. Remember, there are no right or wrong answers.

3. How great a sense of personal responsibility do you feel for the well-being of refugees in other parts of the world?

   1 2 3 4 5

   no responsibility — a great sense of responsibility

4. How great an impact do you feel your 4 hours per month contribution would have on the well-being of refugees in other parts of the world?

1	2	3	4	5
no impact				a great amount of impact

5. How great a sacrifice would it be to you to donate 4 hours per month of your time to this program?

1	2	3	4	5
no sacrifice				a great sacrifice

6. How important is the well-being of refugees in other parts of the world to you, personally?

1	2	3	4	5
not at all important				very important

7. How important do you think it is to the refugees that you, personally make this contribution of time?

1	2	3	4	5
not at all important				very important

8. Imagine yourself in the situation of being asked by a Red Cross worker to donate 4 hours per month towards this program. What do you believe you actually would do?

1	2	3	4	5
definitely would not volunteer	probably would not volunteer	don't know	probably would volunteer	definitely would volunteer

---

*designated as the prosocial action choice

APPENDIX C

RATING CRITERIA FOR MORAL JUSTIFICATIONS[1]

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[1] Adapted from Kohlberg (1971, 1976)

I. PRECONVENTIONAL LEVEL

A person at this level is "responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels in terms of either the physical or hedonistic consequences of action (punishment, reward, exchange of favors) or in terms of the physical power of those who enunciate the rules and labels", (Kohlberg, 1971, 86).

Stage One

Conception of "right": to avoid breaking rules which are backed by punishment; obedience for its own sake; avoid physical damage to persons and property.

Motivation for doing "right": avoidance of punishment.

Social perspective: does not consider the interests of others or realize that they differ from one's own; physical consequences of action determine its goodness or badness regardless of the human meaning or value of these consequences.

Stage Two

Conception of "right": following rules only when it is to one's immediate interest; acting to meet one's own interest and needs and allowing others to do the same; a fair deal.

Motivation for doing "right": motivated by a desire for reward or benefit; to serve one's own needs in a world where one must recognize that others have their interests as well.

Social perspective: aware that everyone has his own interests to pursue and that these may conflict, so that right is relative (in a concrete sense).

II. CONVENTIONAL LEVEL

"Maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order, and of identifying with the persons or group involved it it", (Kohlberg, 1971, 87).

Stage Three

Conception of "right": living up to what is expected by people close to you or what people generally expect of people in your role as wife, brother, etc.; having good motives and showing concern about others; good behavior is that which pleases or helps others and is approved by them.

Motivation for doing "right": need to be a "good" person (stereotypically) in your own eyes and in those of others; motivated by actual or anticipated disapproval of others.

Social perspective: aware of shared feelings, agreements, and expectations which take primacy over individual interests; Golden Rule (in the concrete sense of putting oneself in the other's shoes).

Stage Four

Conception of "right": fulfilling actual duties to which you have agreed; contributing to society, the group, or institution.

Motivation for doing "right": to maintain the social order for its own sake; to avoid breakdown in the system -- "if everyone did it".

Social perspective: takes the point of view of the system that defines roles and rules; considers individual relations in terms of place in the system.

III. POST CONVENTIONAL LEVEL

"At this level there is a clear effort to define moral values and principles that have validity and application apart from the authority of the groups or persons holding these principles, and apart from the individual's own identification with these groups", (Kohlberg, 1971, 87).

Stage Five

Conception of "right": being aware that people hold a variety of values and opinions, that most values and rules are relative to your group -- these relative rules should usually be upheld however, in the interest of impartiality and because they are the social contract; some non-relative rights and values like life and liberty however, must be upheld in any society regardless of majority opinion.

Motivation for doing "right": a sense of obligation to law because of one's social contract to make and abide by laws for the welfare of all and for the protection of all people's rights.

Social perspective: rationality that is aware that values and rights are prior to social attachments and contracts; integrates differing perspectives by formal mechanism of agreement, objective impartiality, and due process.

Stage Six

Conception of "right": following self-chosen ethical principles; when particular laws or social agreements violate these principles, one acts in accordance with these principles; principles are characterized by universality and consistency: the equality of human rights and respect for the dignity of human beings as individual persons.

Motivation for doing "right": belief in the validity of moral principles, and a sense of personal commitment to them.

Social perspective: persons are ends in themselves and must be treated as such.

Note: Moral justifications which cannot clearly be assigned a stage score should be rated as unscoreable (U).

APPENDIX D

ANALYSES OF VARIANCE SUMMARY TABLES FOR INDEPENDENT VARIABLES RESPONSES ACROSS FOUR SUBTESTS

Independent Variable #1: Moral Reasoning Level

(n = 35)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	43.668	34	1.284	
Treatments	3.063	3	1.021	1.296 (ns)
Interaction	80.375	102	0.788	
Total	127.105			

Subtest	Mean
1	2.957
2	3.357
3	3.257
4	3.157

Independent Variable #2: Responsibility

(n = 56)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	81.482	55	1.481	
Treatments	129.375	3	43.125	56.417**
Interaction	126.125	165	0.764	
Total	336.982			

Newman-Keuls Comparison between Ordered Means[1]

	Ordered subtests			
	3	1	4	2
Means:	4.554	2.875	2.821	2.714

---

[1] means underscored by a common line are not significantly different, $p < .05$

$^{**}p < .01$

Independent Variable #3: Effectiveness

(n = 56)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	66.054	55	1.201	
Treatments	190.661	3	63.554	92.932**
Interaction	112.839	165	0.684	
Total	369.554			

Newman-Keuls Comparison between Ordered Means[1]

Ordered subtests

	3	2	4	1
Means:	4.857	3.964	2.732	2.625

---

[1] means underscored by a common line are not significantly different, $p < .05$

$^{**}p < .01$

Independent Variable #4: Sacrifice

(n = 56)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	113.281	55	2.060	
Treatments	43.085	3	14.361	9.745**
Interaction	243.165	165	1.474	
Total	399.531			

Newman-Keuls Comparison between Ordered Means[1]

Ordered subtests

	1	3	2	4
Means:	3.464	2.982	2.661	2.268

---

[1] means underscored by a common line are not significantly different, $p < .05$

** $p < .01$

Independent Variable #5: Importance to Self

(n = 56)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	78.388	55	1.425	
Treatments	115.906	3	38.635	55.996**
Interaction	113.844	165	0.690	
Total	308.138			

Newman-Keuls Comparison between Ordered Means[1]

Ordered subtests

	3	1	2	4
Means:	4.839	4.232	$\underline{3.268 \quad 3.071}$	

---

[1] means underscored by a common line are not significantly different, $p < .05$

$^{**}p < .01$

Independent Variable #6: Importance to Other

(n = 56)

Source of Variation	Sum of Squares	df	Mean Square	F
Subjects	134.482	55	2.445	
Treatments	97.018	3	32.339	37.189**
Interaction	143.482	165	0.870	
Total	374.982			

Newman-Keuls Comparison between Ordered Means[1]

Ordered subtests

$$\begin{array}{lcccc} & \underline{3} & \underline{2} & \underline{4} & \underline{1} \\ \text{Means:} & 4.625 & 4.125 & \multicolumn{2}{c}{\underline{3.107 \quad 3.107}} \end{array}$$

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[1] means underscored by a common line are not significantly different, $p < .05$

** $p < .01$